



425

Boeing Realty Corporation
4900 E. Conant St. Bldg 1
Long Beach, CA 90808

26 July 2005
C6-BRC-T-05-007

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013


Attention: ATTN: Information Technology Unit

Subject: **COMPLIANCE FILE C1-95-036, ORDER NO. R4-2002-0030,
WASTE DISCHARGE REQUIREMENTS (WDR),
SECOND QUARTER 2005 DISCHARGE MONITORING REPORT,
(FILE NO. 95-036, SLIC 0410), BOEING REALTY CORPORATION,
FORMER C-6 FACILITY (Building 2 Area), 19503 SOUTH NORMANDIE
AVENUE, LOS ANGELES, CA**

To Whom It May Concern:

Please find enclosed for your review, a copy of the subject document prepared by Arcadis G&M, Inc. for Boeing Realty Corporation.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [CWC Sections 13263, 13267, and 13268]

If you have any questions, please contact the undersigned at 949-790-1920.

Sincerely,



Mario Stavale
Boeing Realty Corporation

Cc: Robert Scott, Boeing Realty Corporation
 Dan Hess, Sunrider

Enclosure



Infrastructure, buildings, environment, communications

ARCADIS G&M, Inc.
1400 No. Harbor Boulevard
Suite 700
Fullerton
California 92835-4127
Tel 714.278.0992
Fax 714.278.0051
www.arcadis-us.com

ATTN: Information Technology Unit

California Regional Water Quality Control Board
Los Angeles Region (RWQCB)
320 West 4th Street, Suite 200
Los Angeles, California 90013

ENVIRONMENTAL

Subject:

Second Quarter 2005 Discharge Monitoring Report - Draft
Waste Discharge Requirements Order Number R4-2002-0030 (Series 007)
Compliance File Number CI-95-036, SLIC 0410
Project Site: Former Boeing C-6 Facility (Building 2 Area), Los Angeles, California

Date:
July 22, 2005

Dear Information Technology Unit:

On behalf of Boeing Realty Corporation (BRC), ARCADIS is submitting this quarterly monitoring report per the Waste Discharge Requirements (WDR) Order Number R4-2002-0030 (Series 007). The purpose of this report, and future WDR reports, is to provide the Los Angeles Regional Water Quality Control Board (RWQCB) with a summary of bioremediation amendment injections and groundwater monitoring activities performed at the above-referenced project site. The site is located at 19503 Normandie Avenue, Los Angeles, California. Figures 1 and 2 illustrate the site location and the site layout, respectively.

Contact:
Barry Molnaa

Phone:
3023

Email:
bmolnaa@arcadis-us.com

Project Number:
CA000663.0001.00005

This monitoring report summarizes groundwater amendment and monitoring activities performed during the second quarter of 2005. Amendment activities performed are summarized in Section 1.0. Groundwater monitoring activities performed to evaluate the initial distribution of amendment solution are summarized in Section 2.0. A certification statement is provided in Section 3.0.

1.0 Amendment Activities

Amendment activities (carbohydrate injection or water injection testing activities) were not conducted during the second quarter of 2005.

2.0 Monitoring Activities

During the second quarter of 2005, Week 36 of post-injection groundwater monitoring was conducted per the WDR monitoring schedule (sample Week 2, Week 6, Week 12, Week 16, Week 21, and Week 36 after the first injection).

July 22, 2005

Week 36 post-injection groundwater monitoring was conducted on June 15, 2005. During Week 36 of post-injection monitoring, 12 monitoring wells (IRZMW001A/B, IRZMW002A/B, IRZMW004, IRZMW005, IRZCMW001, IRZCMW002, IRZCMW003, CMW001, CMW002, and CMW026) were gauged. Four monitoring wells (IRZMW004, IRZCMW002, CMW001, and CMW002) were sampled. The monitoring well locations are identified on Figure 2. The groundwater samples from Week 36 post-injection monitoring were analyzed for volatile organic compounds (VOCs), total organic carbon (TOC), bromide, total iron, total manganese, dissolved manganese, nitrate, sulfate, and permanent gases (dissolved oxygen [DO], carbon dioxide, nitrogen, methane, ethane, and ethene). Field parameters of purged groundwater were also collected (ferrous iron, pH, DO, oxidation reduction potential [ORP], specific conductance, and temperature).

Field parameter data, laboratory analytical methods, and analytical results from the groundwater monitoring events are summarized in Tables 1 through 4. Laboratory analytical data with associated chain-of-custody documentation are provided in Appendix A. Sample collection logs with field parameters and monitoring well sampling data are maintained in the project files and are not provided with this report.

Prior to collecting the groundwater samples, depth to groundwater was measured in each monitoring well by using a water level meter accurate to 0.01 feet. Figure 3 shows the groundwater elevation contours for Zones B and C in June 2005.

Groundwater samples were collected using low flow sampling techniques, so that the purge rate was generally less than 600 milliliters per minute (mL/min) and drawdown while purging was less than 1 foot.

The sampling methodology also involved use of a flow-through cell that contains field instrumentation used to measure groundwater stabilization parameters (i.e., temperature, pH, specific conductance, ORP, and DO). For each monitoring well, the flow-through cell was connected to a submersible pump with dedicated polyethylene tubing. Once the field parameters stabilized, groundwater samples were collected in laboratory-prepared containers. Field parameters and other relevant sampling data were documented on sample collection logs. The groundwater samples were transported in a chilled ice chest with proper chain-of-custody documentation to an analytical laboratory certified by the State of California (Severn Trent Laboratories, Inc.).

3.0 Certification Statement

I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

ARCADIS

LA Regional Water Quality
Control Board Information
Technology Unit

July 22, 2005

Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions or comments regarding this discharge monitoring report, please contact Barry Molnaa or Eric Lothman at (714) 278-0992.

Sincerely,

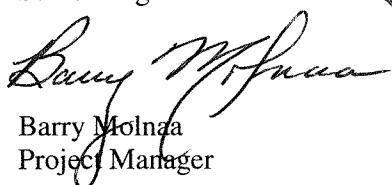
ARCADIS G&M, Inc.



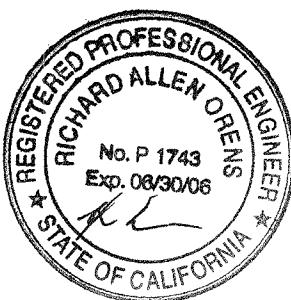
Eric Lothman, P.E.
Project Engineer



Richard Orens, P.E.
Senior Engineer



Barry Molnaa
Project Manager



Copies:

Stephanie Sibbett-Brutocao, Boeing Realty Corporation
Project File

Enclosures:

- Figure 1 - Site Location
- Figure 2 - Amendment Point and Monitoring Well Locations
- Figure 3 - Groundwater Contour Map for Zones B and C - June 2005
- Table 1 - Groundwater Parameter and Total Organic Carbon Results
- Table 2 - Inorganic Analytical Results
- Table 3 - Volatile Organic Compound Analytical Results
- Table 4 - Permanent Gas Analytical Results
- Appendix A - Laboratory Reports and Chain-of Custody Documents

FIGURES

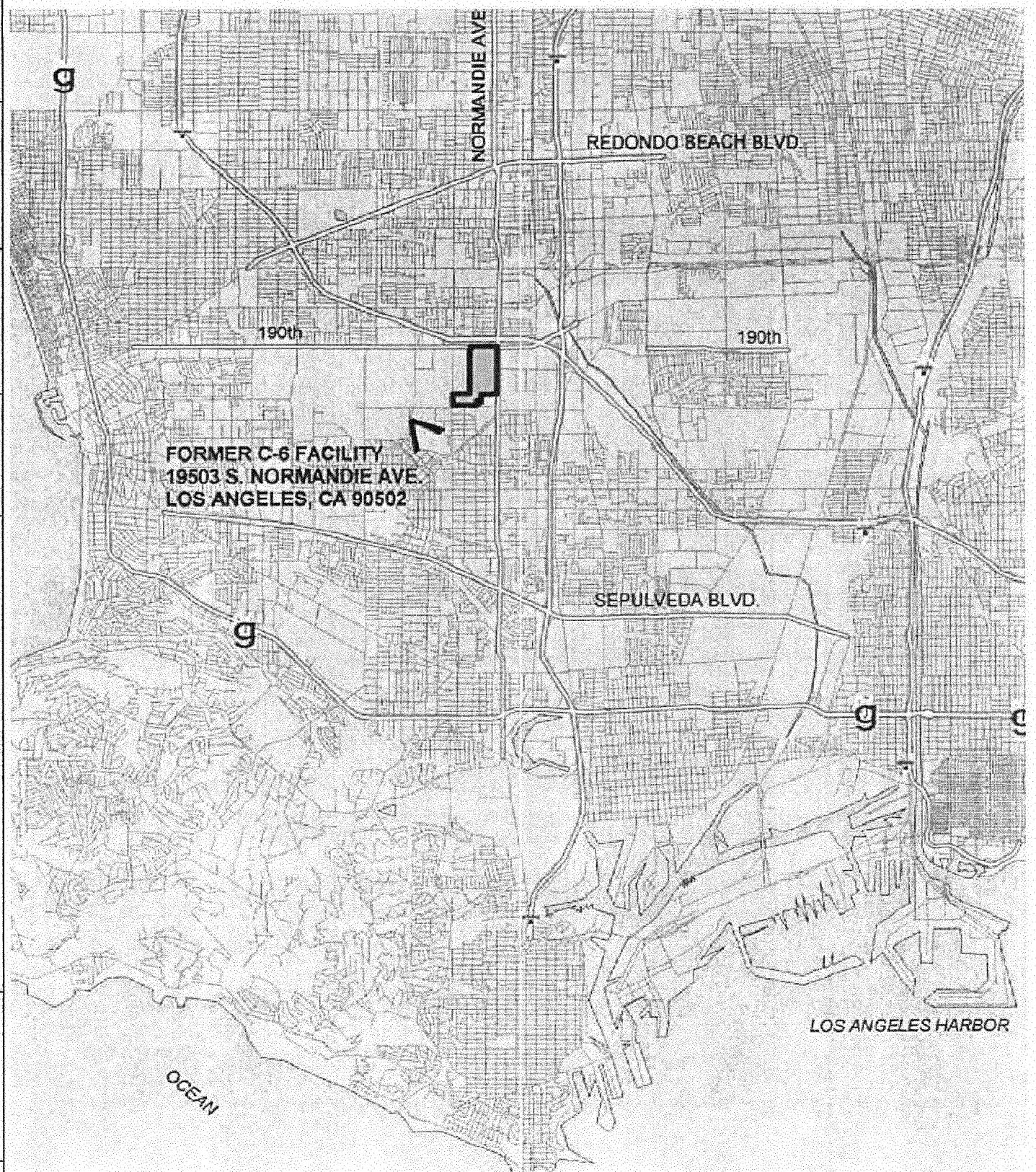


ARCADIS

Figures

DATE: 11/5/03 PR#: CA663.0105 DWG: G:\drawings\aproject\boeing\2003\sl-1

ART: QUINONES PM: MOLNAA CHK: LOTHMAN FILE:



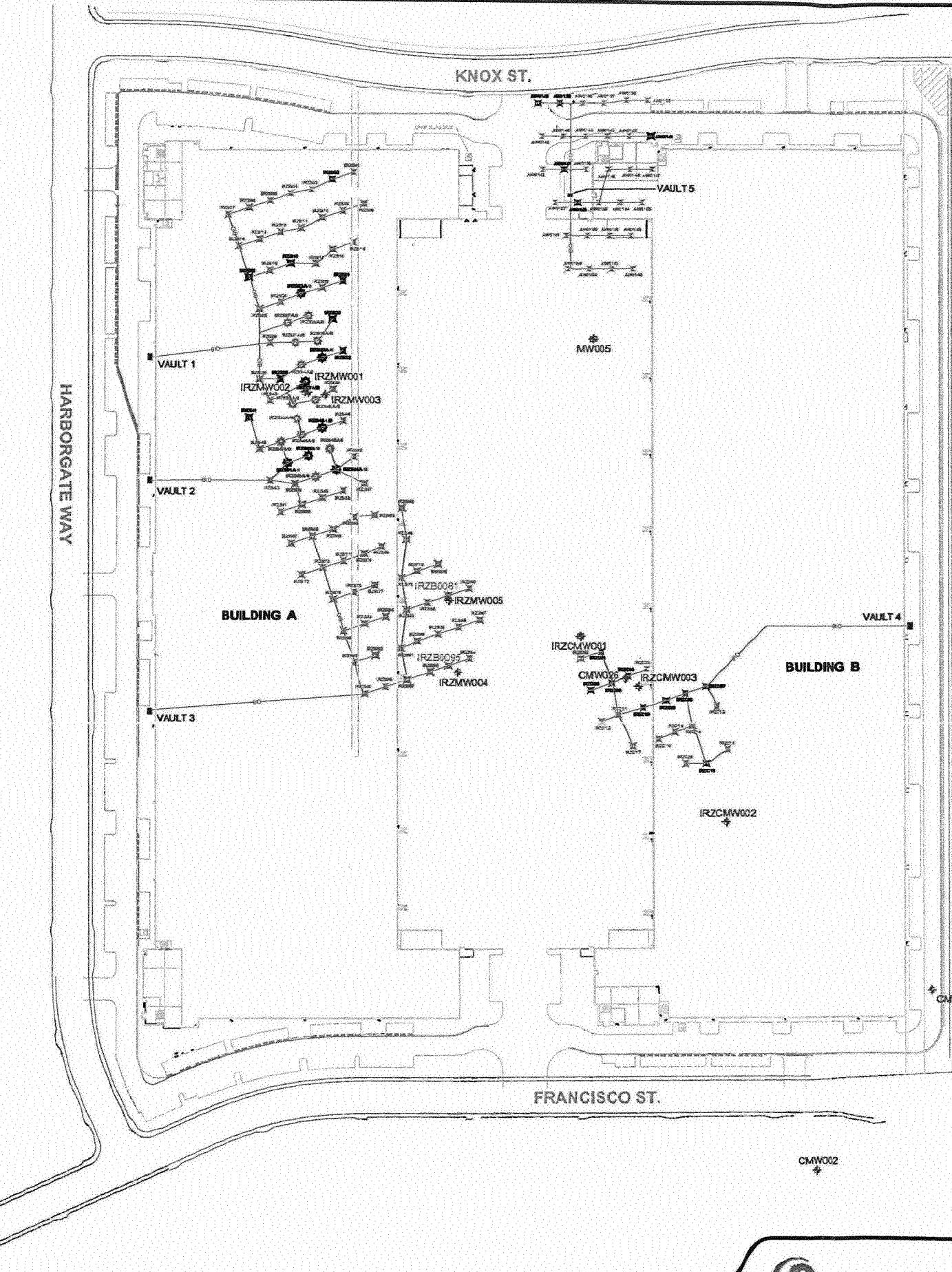
Base map download from "Tiger File" data website hosted by ESRI.



SITE LOCATION

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE
1



BASE MAP PROVIDED BY HILL PINKERT ARCHITECTS, INC. IN FEBRUARY 2003

LEGEND

IRZCMW005	BIOGROUNDWATER MONITORING WELL
IRZB008	DUAL BIOINJECTION POINT
IRZB009	SINGLE BIOINJECTION POINT
IRZB010	AMENDMENT POINTS TAKEN OUT OF SERVICE
IRZB005	AMENDMENT POINTS REQUIRING MODERATE INJECTION PRESSURE
IRZB006	AMENDMENT POINTS THAT SIPHON DURING INJECTION
VAULT 1	FLUSH MOUNTED VAULT FOR SUBSURFACE REMEDIATION PIPING
BIO	BIOREMEDIATION SYSTEM PIPING

N
0 90 180
SCALE IN FEET

ALL DIMENSIONS AND LOCATIONS APPROXIMATE

AMENDMENT POINT AND MONITORING WELL LOCATIONS
BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA



DATE: 7/14/05 | PRJ#: CA 663.01.05 | DWG: G:\dwgs\prjct\boeing\2005\GW0605-ZonesB-C

ART: CHIU

P.M.: MOLNAA

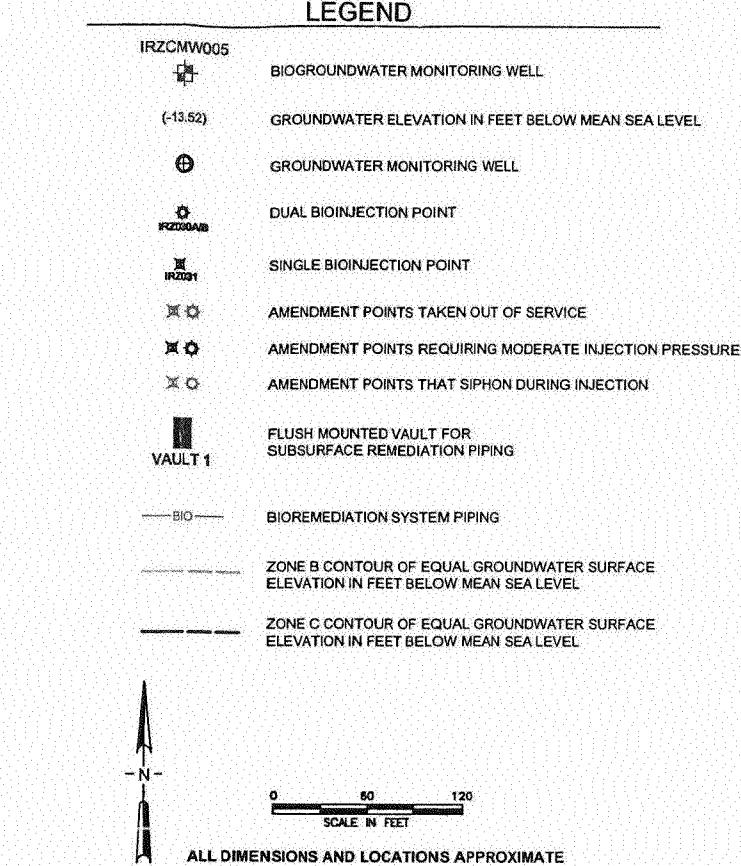
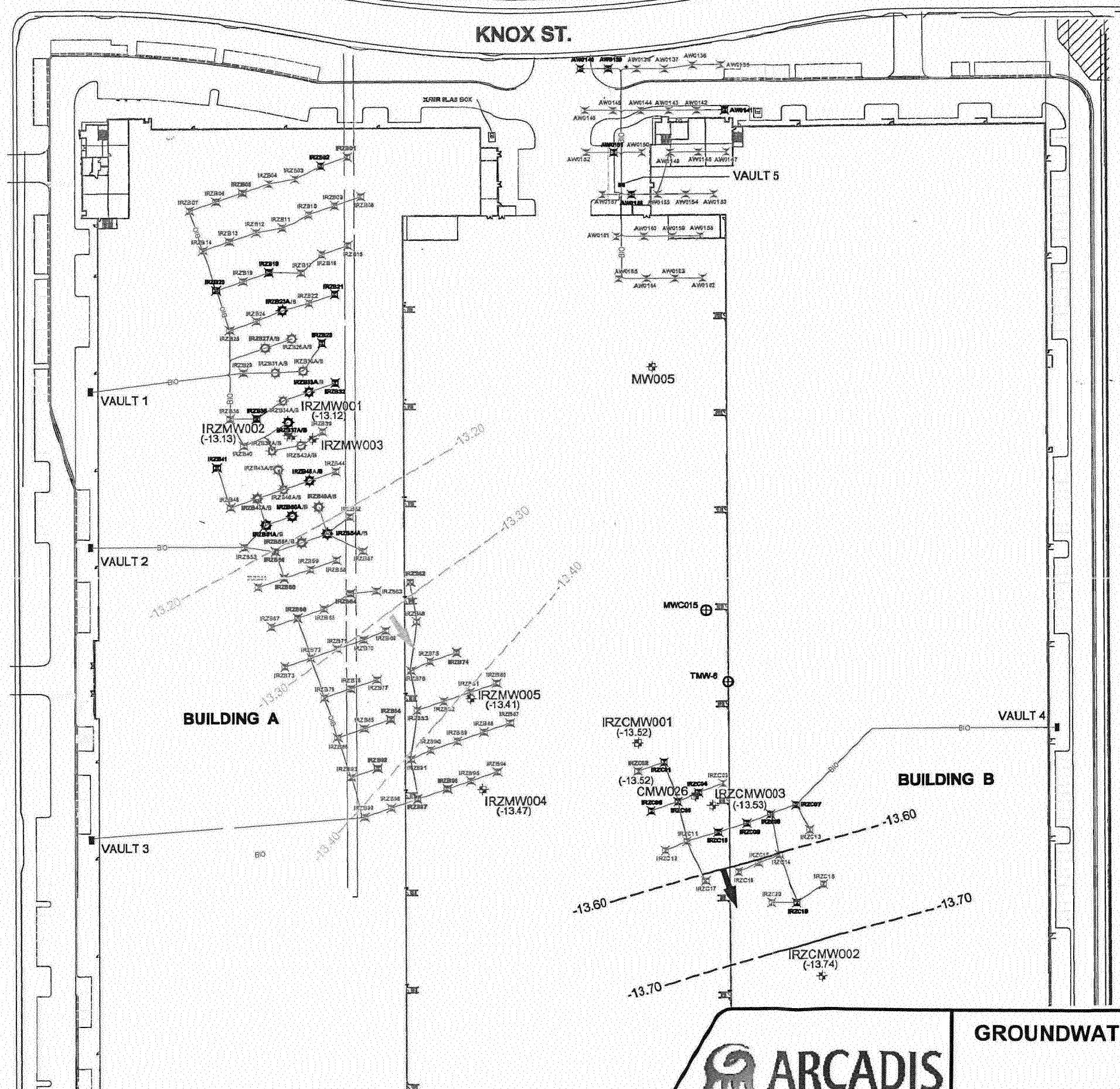
CHK: LOTHMAN

FILE:

BIO

HARBORGATE WAY

KNOX ST.



GROUNDWATER CONTOUR MAP FOR ZONES B AND C
JUNE 2005
BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE
3

TABLES



ARCADIS

Tables

Table 1. Groundwater Parameter and Total Organic Carbon Results
Former Building 2 Area, Former Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Top of Casing (feet msl)	Depth to Water (feet)	Groundwater Elevation (feet msl)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Temperature (°C)	Specific Conductance (umhos/cm)	Hydrogen Sulfide (mg/L)	Ferrous Iron (mg/L)	Total Organic Carbon (mg/L)
IRZB0081	Zone B	A	Baseline	10/9/2003	50.28	64.53	-14.25	6.7	5.1	144.4	21.6	1,563	Too Turbid	Too Turbid	5.8
			Week 2	10/22/2004		64.51	-14.23	7.3	3.7	-42.8	22.6	922	0	<1.0	2.8
			Alt. Amend. Monitoring	12/14/2004		64.48	-14.20	5.2	1.8	-53.0	21.9	8,147	NM	NM	4,560
			Week 12	1/5/2005		64.61	-14.33	4.9	1.3	-21.9	21.7	7,384	Too Turbid	Too Turbid	6,140
			Alt. Amend. Monitoring	1/14/2005		64.39	-14.11	4.9	27.9	6.5	22.4	4,755	NM	NM	4,750
			Week 16	1/28/2005		64.25	-13.97	5.1	0.8	-43.1	21.7	4,803	<2.5	2.2	3,750
			Alt. Amend. Monitoring	2/11/2005		63.94	-13.66	5.7	1.1	-92.9	21.7	4,088	NM	NM	2,140
			Week 21	3/20/2005		64.29	-14.01	5.5	2.1	-68.2	22.1	5,309	0.7	Too Turbid	3,260
		A	Baseline	10/7/2003	50.08	64.59	-14.51	7.0	5.6	83.7	23.1	1,435	0	1.3	3.0
			Week 2	10/22/2004		64.50	-14.42	7.4	5.1	-47.1	22.2	661	0	<1.0	2.4
			Week 6	11/19/2004		64.37	-14.29	7.4	6.7	67.2	22.1	1,142	Too Turbid	Too Turbid	4.4
			Alt. Amend. Monitoring	12/14/2004		64.49	-14.41	7.4	4.9	-5.4	22.2	1,296	NM	NM	3.3
			Week 12	1/5/2005		65.28	-15.20	6.8	2.6	-90.5	21.1	5,873	Too Turbid	Too Turbid	1,890
			Alt. Amend. Monitoring	1/14/2005		NM	--	6.7	20.6	-107.7	21.9	4,858	NM	NM	2,400
			Week 16	1/28/2005		64.41	-14.33	6.7	2.1	-98.1	20.7	4,592	<2.0	1	2,060
		A	Alt. Amend. Monitoring	2/11/2005	54.18	64.04	-13.96	6.8	2.4	-103.8	21.0	4,244	NM	NM	1,580
			Week 21	3/20/2005		64.29	-14.21	6.9	3.5	-116.4	21.6	2,555	0	Too Turbid	811
			Baseline	10/30/2003		68.05	-13.87	6.7	4.8	245.9	21.9	2,354	0	0	5.0
			Injection Evaluation	5/21/2004		68.61	-14.43	7.1	2.7	47.4	25.3	2,595	NM	NM	5.5
			Injection Evaluation	10/12/2004		67.69	-13.51	6.0	1.2	-31.6	21.0	2,538	NM	NM	3.5
			Week 2	10/22/2004		68.00	-13.82	6.9	0.3	-10.1	25.6	2,339	0	<1.0	4.3
			Week 6	11/18/2004		68.08	-13.90	6.9	1.5	33.1	27.1	2,048	0	<1.0	5.3
		A	Week 12	1/4/2005	54.18	67.84	-13.66	6.9	0.4	21.9	24.2	2,345	0	<1.0	6.1
			Week 16	1/27/2005		67.85	-13.67	6.9	0.3	64.8	22.8	1,893	0	0	4.4
			Week 21	3/19/2005		67.65	-13.47	6.9	0.3	-77.9	26.1	1,994	0	1.0	3.6
			Week 36	6/15/2005		67.28	-13.10	NM	NM	NM	NM	NM	NM	NM	NM
			Baseline	10/30/2003		67.98	-13.88	6.8	6.2	159.6	21.8	1,254	0	1	3.8
			Injection Evaluation	5/21/2004		68.11	-14.01	7.3	6.8	78.3	23.7	1,278	NM	NM	3.6
			Injection Evaluation	10/12/2004		67.70	-13.60	7.3	2.2	5.6	21.4	1,042	NM	NM	5.8
		A	Week 2	10/22/2004	54.10	68.07	-13.97	7.3	4.0	53.7	22.7	1,168	0	0.1	2.0
			Week 6	11/18/2004		68.00	-13.90	7.2	6.6	125.0	24.2	953	0.1	0.3	5.2
			Week 12	1/4/2005		67.72	-13.62	7.3	6.1	40.6	21.3	1,111	0	0.4	6.3
			Week 16	1/27/2005		67.77	-13.67	7.2	4.7	94.9	22.6	919	0	0	3.0
			Week 21	3/19/2005		67.59	-13.49	7.3	5.4	11.1	24.4	982	0.1	0.5	4.4
			Week 36	6/15/2005		67.22	-13.12	NM	NM	NM	NM	NM	NM	NM	NM
			Baseline	10/30/2003		67.98	-13.91	6.8	3.1	-140.7	22.1	1,852	5	2	21.8
		A	Injection Evaluation	5/21/2004	54.07	68.39	-14.32	7.2	0.9	-52.5	22.1	2,038	NM	NM	13.3
			Injection Evaluation	10/12/2004		67.85	-13.78	6.1	1.1	-54.1	21.5	2,760	NM	NM	11.1
			Week 2	10/21/2004		68.05	-13.98	6.4	0.2	-107.4	23.5	2,860	0	<1.0	10.1
			Week 6	11/18/2004		68.21	-14.14	6.5	2.2	-102.7	25.8	2,220	0	Too Turbid	9.7
			Week 12	1/4/2005		67.74	-13.67	6.8	0.9	-26.6	21.3	2,389	0	Too Turbid	7.2
			Week 16	1/27/2005		68.02	-13.95	6.8	0.7	19.3	22.2	1,882	0	0.5	6.0
			Week 21	3/19/2005		67.22	-13.15	6.9	0.8	-24.1	22.0	1,865	0	2	11.2
		A	Week 36	6/15/2005		67.19	-13.12	NM	NM	NM	NM	NM	NM	NM	NM
			Baseline	10/30/2003	54.17	68.07	-13.90	6.8	4.1	110.3	21.7	1,125	0	Too Turbid	4.1
			Injection Evaluation	5/21/2004		68.97	-14.80	7.2	4.2	45.5	24.0	1,204	NM	NM	5.2
			Injection Evaluation	10/12/2004		67.61	-13.44	7.1	1.3	8.6	21.5	1,254	NM	NM	6.2
			Week 2	10/21/2004		67.99	-13.82	7.3	2.4	-34.3	25.5	1,325	0	<1.0	2.8
			Week 6	11/18/2004		68.18	-14.								

Table 1. Groundwater Parameter and Total Organic Carbon Results
Former Building 2 Area, Former Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Top of Casing (feet msl)	Depth to Water (feet)	Groundwater Elevation (feet msl)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Temperature (°C)	Specific Conductance (umhos/cm)	Hydrogen Sulfide (mg/L)	Ferrous Iron (mg/L)	Total Organic Carbon (mg/L)
IRZMW003A	Zone B	B	Baseline	10/31/2003	54.14	68.21	-14.07	6.8	4.0	210.3	25.7	1,761	Too Turbid	Too Turbid	2.6
			Injection Evaluation	10/12/2004		67.79	-13.65	6.1	1.1	-8.9	21.6	3,107	NM	NM	5.7
			Week 12	1/4/2005		67.82	-13.68	6.6	0.5	-19.2	24.7	2,196	0	<1.0	9.7
			Week 16	1/27/2005		67.85	-13.71	6.6	0.3	123.2	24.7	1,747	0	0	5.5
			Week 21	3/19/2005		67.63	-13.49	6.8	0.5	-45.4	24.7	1,512	Too Turbid	0.3	8.4
IRZMW003B	Zone B	B	Baseline	10/31/2003	54.20	68.24	-14.04	6.8	5.0	280.4	23.3	1,154	Too Turbid	Too Turbid	3.8
			Injection Evaluation	10/12/2004		67.82	-13.62	7.2	3.9	-10.6	22.7	1,276	NM	NM	3.4
			Week 12	1/4/2005		67.84	-13.64	7.2	4.2	54.2	22.0	1,223	0	0.7	3.4
			Week 16	1/27/2005		67.89	-13.69	7.2	4.6	111.2	22.7	974	0	0	3.8
			Week 21	3/19/2005		67.67	-13.47	7.3	3.7	16.9	23.2	961	0	0.6	3.5
IRZMW004	Zone B	C	Baseline	10/7/2003	50.48	64.84	-14.36	7.0	4.8	152.9	22.5	1,449	0	0	3.1
			Injection Evaluation	10/12/2004		64.45	-13.97	7.2	2.5	-40.9	24.1	1,337	NM	NM	2.3
			Alt. Amend. Monitoring	12/14/2004		64.63	-14.15	7.2	4.2	-28.6	23.7	1,473	NM	NM	3.6
			Week 12	1/5/2005		64.77	-14.29	7.2	3.5	16.6	23.6	1,453	0.1	1.0	3.8
			Alt. Amend. Monitoring	1/14/2005		64.56	-14.08	7.1	46.0	109.7	23.2	1,213	NM	NM	4.0
			Alt. Amend. Monitoring	2/11/2005		64.16	-13.68	7.3	2.6	178.0	21.7	1,102	NM	NM	7.4
			Week 21	3/20/2005		64.45	-13.97	7.1	1.2	-130.7	23.0	1,149	0.3	3.0	31.7
			Week 36	6/15/2005		63.95	-13.47	6.7	1.3	-77.5	25.4	2,578	NM	<1.0	23.5
			Baseline	10/7/2003		63.38	-14.44	7.2	4.5	34.0	22.3	965	0	0	2.0
			Week 2	10/22/2004		63.33	-14.39	7.2	1.1	-86.7	22.7	123	0	1.0	1.6
CMW0026	Zone C	A	Week 6	11/19/2004	48.94	63.28	-14.34	7.1	0.7	-202.7	24.0	384	0.2	0.7	11
			Week 12	1/5/2005		63.44	-14.50	7.0	1.6	-13.8	22.3	72	0	1.0	2.7
			Week 16	1/28/2005		63.31	-14.37	6.7	0.1	-108.7	22.6	459	0.8	3.2	22
			Week 21	3/19/2005		62.92	-13.98	7.3	3.6	12.8	22.2	64	0	1.4	11.0
			Week 36	6/15/2005		62.46	-13.52	NM	NM	NM	NM	NM	NM	NM	NM
			Baseline	10/7/2003		63.58	-14.46	7.2	2.7	133.5	22.8	951	0	0	2.0
IRZCMW003	Zone C	B	Injection Evaluation	10/12/2004	49.12	62.98	-13.86	7.3	1.1	-7.5	22.3	969	NM	NM	2.4
			Week 12	1/5/2005		63.62	-14.50	7.3	0.5	-45.8	21.5	907	0	0.2	2.7
			Week 16	1/28/2005		63.41	-14.29	7.3	0.3	105.3	22.6	729	0	0	2.3
			Week 21	3/19/2005		63.03	-13.91	7.4	0.2	-73.8	22.0	730	NM	0.4	2.8
			Week 36	6/15/2005		62.65	-13.53	NM	NM	NM	NM	NM	NM	NM	NM
IRZCMW002	Zone C	C	Baseline	10/8/2003	52.98	67.78	-14.80	7.0	2.4	188.5	21.4	888	0	0	3.2
			Injection Evaluation	10/12/2004		67.25	-14.27	7.4	1.1	-51.0	21.4	974	NM	NM	2.2
			Week 12	1/5/2005		68.02	-15.04	7.4	0.9	146.5	21.3	912	0	0.2	2.2
			Week 21	3/19/2005		67.25	-14.27	7.7	0.2	-169.5	22.5	709	0.4	0.3	11.7
			Week 36	6/15/2005		66.72	-13.74	7.2	0.2	-285.4	23.6	2,024	NM	<0.1	157
CMW001	Zone C	C	Baseline	10/9/2003	51.81	66.81	-15.00	6.8	2.6	-120.0	23.3	948	0.5	0	23
			Week 12	1/5/2005		66.83	-15.02	7.3	0.5	-95.3	23.0	1,017	0	0.3	28
			Week 21	3/18/2005		66.63	-14.82	7.3	0.2	-62.2	23.5	806	0	0	26
			Week 36	6/15/2005		65.68	-13.87	7.3	0.5	-142.3	27.6	1,352	NM	<0.1	15.8
CMW002	Zone C	C	Baseline	10/8/2003	Not Surveyed	65.29	--	6.9	2.2	51.4	23.0	788	0	0	8.0
			Week 12	1/3/2005		64.80	--	5.2	0.5	-6.6	22.5	875	0	0.2	14
			Week 21	3/18/2005		64.51	--	7.3	0.2	-56.7	22.6	699	0	0	12.7
			Week 36	6/15/2005		64.17	--	7.2	0.6	-72.6	24.1	1,427	NM	<0.1	13.3
IRZCMW001	Zone D	D	Baseline	10/8/2003	49.14	63.65	-14.51	7.1	4.2	183.0	21.7	1,219	0	0	3.3
			Injection Evaluation	10/12/2004		NM	NM	7.2	2.5	-12.0	22.3	1,313	NM	NM	2.5
			Week 6	11/18/2004		63.52	-14.38	7.2	1.5	46.9	24.2	1,117	0	0.1	2.3
			Week 12	1/4/2005		63.41	-14.27								

Table 2. Inorganic Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Bromide (mg/L)	Chloride (mg/L)	Total Iron (mg/L)	Dissolved Manganese (mg/L)	Total Manganese (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	
IRZB0081	Zone B	A	Baseline	10/9/2003	0.94	348	25	0.05	1.4	8.5	<1	43.8	
			Week 12	1/5/2005	746	NS	NS	5.1	NS	<2	NS	104	
			Week 16	1/28/2005	<2.5	NS	NS	7.0	NS	<2	NS	38.1	
			Week 21	3/20/2005	<25	283	410	9.5	9.6	<1	<0.5	13.7	
		B	Baseline	10/7/2003	0.85	320	3.30	0.052	0.78	7.2	<1	38.6	
IRZB0095		A	Week 6	11/19/2004	0.64	NS	NS	0.016	NS	6.5 J	NS	49.7	
			Week 12	1/5/2005	18	NS	NS	5.7	NS	<1	NS	45.5	
			Week 16	1/28/2005	<5	NS	NS	7.1	NS	<0.5	NS	20.6	
			Week 21	3/20/2005	<5	90	70	2.3	3.4	0.30	<1	22.0	
			Baseline	10/30/2003	3.6	615	6.8	0.019	0.24 J	14	<1	88.6	
IRZMW001A		A	Week 6	11/18/2004	1.9	NS	NS	0.064	NS	8.8 J	NS	60.2	
			Week 12	1/4/2005	1.9	NS	NS	0.019	NS	9.4	NS	62.9	
			Week 16	1/27/2005	1.9	NS	NS	0.048	NS	9.2	NS	62.3	
			Week 21	3/19/2005	2.1	490	0.35	0.15	0.17	3.1	0.3 JQC	59.3	
			Baseline	10/30/2003	0.73	218	2.9	0.020	0.09 J	5.8	<0.5	98.0	
IRZMW001B		A	Week 6	11/18/2004	0.41 J	NS	NS	0.0041 J	NS	6.8 J	NS	87.9	
			Week 12	1/4/2005	0.43 J	NS	NS	0.0014 J	NS	7.2	NS	93.9	
			Week 16	1/27/2005	0.47 J	NS	NS	0.037	NS	7.3	NS	93.2	
			Week 21	3/19/2005	0.45 J	158	0.078 J	0.0023 J	0.02	5.5	<0.5	80.8	
			Baseline	10/31/2003	2.3	444	13	3.6	3.7 J	0.13	<1	77.8	
IRZMW002A		A	Week 6	11/18/2004	1.7	NS	NS	2.1	NS	4.3 J	NS	64.6	
			Week 12	1/4/2005	1.8	NS	NS	1.7	NS	3.7	NS	68.1	
			Week 16	1/27/2005	1.7	NS	NS	1.5	NS	5.0	NS	64.9	
			Week 21	3/19/2005	1.8	509	3.6	1.5	1.9	3.0	<0.5	66.2	
			Baseline	10/30/2003	0.94	220	12	0.150	0.31 J	6.9	0.21 QC	80.9	
IRZMW002B		A	Week 6	11/18/2004	0.66	NS	NS	0.035	NS	8.6 J	NS	98.1	
			Week 12	1/4/2005	0.64	NS	NS	0.018	NS	9.5	NS	94.8	
			Week 16	1/27/2005	0.78	NS	NS	0.022	NS	8.1	NS	67.6	
			Week 21	3/19/2005	0.73	229	1.3	0.044	0.07	2.7	<0.5	47.8	
			Baseline	10/9/2003	0.97	358	2.5	0.02	0.10	8.6	<1	41.6	
IRZMW005		A	Week 6	11/19/2004	0.98	NS	NS	0.05	NS	4.7 J	NS	36.0	
			Week 12	1/5/2005	0.89	NS	NS	2.6	NS	<0.1	NS	23.4	
			Week 16	1/28/2005	<25	NS	NS	3.5	NS	<0.5	NS	15.7	
			Week 21	3/20/2005	<5	438	41.6	5.2	5.4	0.083 J	<1	5.3	
			Baseline	10/31/2003	1.1	465	5.6	0.0069 J	0.11 J	9.6	<1	48.3	
IRZMW003A		B	Week 12	1/4/2005	1.4	NS	NS	0.10	NS	6.1	NS	41.3	
			Week 16	1/27/2005	1.3	NS	NS	0.12	NS	6.2	NS	41.7	
			Week 21	3/19/2005	0.3 J	147	4.6	0.21	0.33	1.5	<0.5	14.0	
			Baseline	10/31/2003	0.69	240	8.1	0.051	0.23 J	6.3	<0.5	77.9	
IRZMW003B		B	Week 12	1/4/2005	0.59	NS	NS	0.021	NS	6.0	NS	80.8	
			Week 16	1/27/2005	0.58	NS	NS	0.019	NS	5.9	NS	79.8	
			Week 21	3/19/2005	0.56	185	0.75	0.0089 J	0.02	5.9	<0.5	65.9	
			Baseline	10/7/2003	0.89	338	4.8	0.013 J	0.30	8.1	<1	41.2	
IRZMW004		C	Week 12	1/5/2005	0.80	NS	NS	0.0028 J	NS	7.3	NS	42.1	
			Week 21	3/20/2005	0.68	244	2.5	0.50	0.51 B	5.0	<0.5	42.7	
			Week 36	6/15/2005	0.79	284	2.2	0.21J	0.23	6.3	<1	38.1	
			Baseline	10/7/2003	0.55	215	1.7	0.0054 J	0.09	2.8	<1	34.2	
CMW026		A	Week 6	11/19/2004	0.18 J	NS	NS	0.380	NS	0.066 J	NS	4.0	
			Week 12	1/5/2005	<0.5	NS	NS	0.035	NS	0.20	NS	5.0	
			Week 16	1/28/2005	0.14 J	NS	NS	0.57	NS	<0.1	NS	2.3	
			Week 21	3/19/2005	<0.5	3.8	1.8	0.06	0.06	0.44	0.08 J	5.5	
			Baseline	10/7/2003	0.51	191	1.1	0.015	0.16	1.6	<1	49.8	
IRZCMW003		B	Week 12	1/5/2005	0.38 J	NS	NS	0.016	NS	2.1	NS	52.6	
			Week 16	1/28/2005	0.38 J	NS	NS	0.024	NS	2.1	NS	52.3	
			Week 21	3/19/2005	0.36 J	138	0.77	0.014 J	0.10	1.6	<0.5	50.7	

Table 2. Inorganic Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Bromide (mg/L)	Chloride (mg/L)	Total Iron (mg/L)	Dissolved Manganese (mg/L)	Total Manganese (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)
IRZCMW002	Zone C	C	Baseline	10/8/2003	0.37 J	150	0.23	0.10	0.04	2.5	<0.5	62.5
			Week 12	1/5/2005	0.37 J	NS	NS	0.0012 J	NS	3.2	NS	61.6
			Week 21	3/19/2005	0.38 J	144	0.20	0.67	0.75	<0.1	<0.5	56.9
			Week 36	6/15/2005	0.19B	152	1.2	2.4J	2.8	<0.1	<1.0	3.6
		C	Baseline	10/9/2003	0.32 J	127	2.8	0.12	0.16	<0.1	<1	115
			Week 12	1/5/2005	0.23 J	NS	NS	0.34	NS	<0.1	NS	156
			Week 21	3/18/2005	0.24 J	112	0.15	0.36	0.39	<0.1	<0.5	143
			Week 36	6/15/2005	0.22B	87.8	0.16	0.21J	0.23	<0.1	<0.1	99.0
		C	Baseline	10/8/2003	0.24 J	110	0.63	0.21	0.13	<0.1	<0.5	84.9
			Week 12	1/3/2005	0.23 J	NS	NS	0.15 B	NS	<0.1	NS	89.0
			Week 21	3/18/2005	0.25 J	110	0.29	0.13	0.16	<0.1	<0.5	85.7
			Week 36	6/15/2005	0.24B	110	0.18	0.13J	0.15	<0.1	<0.1	89.1
		D	Baseline	10/8/2003	0.73	275	1.9	0.0055 J	0.04	2.7	<0.5	37.7
			Week 6	11/18/2004	0.67	NS	NS	0.0022 J	NS	2.2 J	NS	37.2
			Week 12	1/4/2005	0.69	NS	NS	0.0093 J	NS	2.1	NS	38.0
			Week 21	3/19/2005	0.68	273	0.093 J	0.02	0.02	2.0	<1	35.9
EPA Analytical Method				300.0A	300.0A	6010B	6010A	6010B	300.0A	300.0A	300.0A	300.0A

Notes:

Group A: wells located within the estimated injection area

Group B: wells located at the estimated edge of the injection area

Group C: wells located downgradient of the treatment area

Group D: wells located upgradient of the treatment area

J - The analyte results were positively identified, and numerical values are an approximate concentration of the analyte in the sample.

QC - A quality control parameter associated with the analyte is not within laboratory or method required quality control limits.

<1.0 - Not detected above indicated reporting limit

NS - Not Sampled

Table 3. Volatile Organic Compound Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans-1,2-DCE (ug/L)	Vinyl Chloride (ug/L)	1,1,2-TCA (ug/L)	1,1-DCE (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	Acetone (ug/L)	Chlorobenzene (ug/L)	Chloroform (ug/L)	Methyl Ethyl Ketone (ug/L)	Methylene Chloride (ug/L)
IRZB0081	Zone A	A	Baseline	10/9/2003	<170	6,500	<170	<170	<170	63 J	<170	<170	<1,700	<170	50 J	<830	<170	
			Alt. Amend. Monitoring	12/14/2004	<120	5,300	89 J	<120	<120	60 J	<120	<120	<1,200	<120	<620	<120		
			Week 12	1/5/2005	<50	1,900	100	<50	<50	17 J	<50	<50	240 J	<50	<50	750	<50	
			Alt. Amend. Monitoring	1/14/2005(a)	<50	3,000	150	<50	<50	32 J	<50	<50	240 J	<50	<50	790	<50	
			Week 16	1/28/2005	<100	4,600	260	<100	<100	34 J	<100	<100	320 J	<100	<100	400 J	<100	
			Alt. Amend. Monitoring	2/11/2005	<50	4,200	690	<50	<50	39 J	<50	<50	390 J	<50	19 J	260	17 J	
			Week 21	3/20/2005	<50	2,300	2,600	<50	<50	31 J	<50	<50	690	<50	<50	1,600	<50	
IRZB0095	Zone A	A	Baseline	10/7/2003	<120	5,800	<120	<120	<120	49 J	<120	<120	<1,200	<120	150	<620	150	
			Week 6	11/19/2004	<100	3,900	<100	<100	<100	64 J	<100	<100	<1,000	<100	85 J	<500	<100	
			Alt. Amend. Monitoring	12/14/2004	<83	4,300	<83	<83	<83	68 J	<83	<83	<830	<83	96	<420	<83	
			Week 12	1/5/2005	9 J	1,000	9.0 J	<25	<25	11 J	<25	<25	<250	<25	16 J	110 J	9.4 J	
			Alt. Amend. Monitoring	1/14/2005	6.7 J	620	340	<10	<10	12	<10	<10	63 J	<10	6.6 J	170	2 J	
			Week 16	1/28/2005	5.7 J	450	930	<12	<12	15	<12	<12	38 J	<12	12	130	<12	
			Alt. Amend. Monitoring	2/11/2005	<25	440	1,100	<25	<25	20 J	<25	<25	95 J	<25	13 J	160	<25	
			Week 21	3/20/2005	<25	430	1,700	<25	<25	25	<25	<25	<250	<25	13 J	77 J	<25	
IRZMW001A	Zone A	A	Baseline	10/30/2003	<500	11,000	<500	<500	<500	<500	<500	<500	<5,000	<500	<500	<2,500	<500	
			Week 6	11/18/2004	<120	7,200	43 J	<120	<120	77 J	<120	<120	<1,200	<120	<120	<620	<120	
			Week 12	1/4/2005	<120	6,900	<120	<120	<120	66 J	<120	<120	<1,200	<120	<120	<620	<120	
			Week 16	1/27/2005	<120	7,700	38 J	<120	<120	58 J	<120	<120	<1,200	<120	<120	<620	<120	
			Week 21	3/19/2005	<250	9,800	2 J	<250	<250	81 J	<250	<250	<2,500	<250	<250	<1,200	<250	
IRZMW001B	Zone A	A	Baseline	10/30/2003	<120	4,800	54 J	<120	<120	50 J	<120	<120	<1,200	<120	<120	<620	<120	
			Week 6	11/18/2004	<25	1,400	<25	<25	<25	19 J	<25	<25	<250	<25	<25	<120	<25	
			Week 12	1/4/2005	<25	1,300	<25	<25	<25	16 J	<25	<25	<250	<25	<25	<120	<25	
			Week 16	1/27/2005	<25	1,600	<25	<25	<25	17 J	<25	<25	<250	<25	<25	<120	<25	
			Week 21	3/19/2005	<50	2,100	<50	<50	<50	25 J	<50	<50	<500	<50	<50	<250	<50	
IRZMW002A	Zone B	A	Baseline	10/30/2003	<120	5,100	660	<120	<120	63 J	<120	<120	<1,200	<120	<120	<620	<120	
			Week 6	11/18/2004	<200	8,300	220	<200	<200	79 J	<200	<200	<2,000	<200	<200	<1,000	<200	
			Week 12	1/4/2005	<100	7,100	460	<100	<100	62 J	<100	<100	<1,000	<100	<100	<500	<100	
			Week 16	1/27/2005	<250	8,700	490	<250	<250	250	<250	<250	<2,500	<250	<250	<1,200	<250	
			Week 21	3/19/2005(b)	<250	9,600	1,300	<250	<250	81 J	<250	<250	<2,500	<250	<250	<1,200	<250	
IRZMW002B	Zone A	A	Baseline	10/30/2003	<12	640	80	<12	<12	8.5 J	<12	<12	73 JB	<12	<12	<62	<12	
			Week 6	11/18/2004	<5	230	13	<5	<5	3.0 J	<5	<5	<50	<5	<5	<25	<5	
			Week 12	1/4/2005	<2.5	170	6	<2.5	<2.5	1.7 J	<2.5	<2.5	8.8 J	<2.5	<2.5	<12	<2.5	
			Week 16	1/27/2005	<5	240	7	<5	<5	<5	<5	<5	<50	<5	<5	<25	<5	
			Week 21	3/19/2005	<5	300	18	<5	<5	3.5 J	<5	<5	<50	2.2 J	<5	<25	<5	
IRZMW005	Zone A	A	Baseline	10/9/2003	<170	6,000	<170	<170	<170	75 J	<170	<170	<1,700	<170	56 J	<830	<170	
			Week 6	11/19/2004	<120	6,500	61 J	<120	<120	74 J	<120	<120	<1,200	<120	51 J	<620	<120	
			Alt. Amend. Monitoring	12/14/2004	<170	7,300	170	<170	<170	84 J	<170	<170	<1,700	<170	54 J	<830	<170	
			Week 12	1/5/2005	<25	110	1,200	<25	<25	12 J	<25	<25	<250	<25	8.3 J	<120	<25	
			Alt. Amend. Monitoring	1/14/2005	<100	740	5,200	<100	<100	60 J	<100	<100	410 J</					

Table 3. Volatile Organic Compound Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans-1,2-DCE (ug/L)	Vinyl Chloride (ug/L)	1,1,2-TCA (ug/L)	1,1-DCE (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	Acetone	Chlorobenzene	Chloroform (ug/L)	Methyl Ethyl Ketone (ug/L)	Methylene Chloride (ug/L)
CMW026	A		Baseline	10/7/2003	<25	1,200	<25	<25	<25	65	<25	<250	<25	21 J	<120	<25		
			Week 6	11/19/2004	<5	35	280	2.6 J	<5.0	<5	41	1.5 J	<5	<50	<5	<5	<25	
			Week 12	1/5/2005	<1	6.5	17	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	6.6 J	<1.0	<1.0	<1.0	
			Week 16	1/28/2005	<2.5	30	160	1.2 J	<2.5	<2.5	16	0.71 J	11.0 J	11 J	<2.5	<2.5	14	<2.5
			Week 21	3/19/2005	<1	3.8	40	0.47 J	<1	<1	11	<1	<1	19	<1	<1	<1	
IRZCMW003	B		Baseline	10/7/2003	<100	2,900	<100	<100	<100	83 J	<100	<100	<1,000	<100	36 J	<500	89 J	
			Week 12	1/5/2005	<100	4,300	<100	<100	<100	46 J	<100	<100	<1,000	<100	<100	<500	<100	
			Week 16	1/28/2005	<100	5,000	44 J	<100	<100	<100	49 J	<100	<100	<1,000	<100	<100	<500	<100
			Week 21	3/19/2005	<120	5,700	350	<120	<120	<120	69 J	<120	<120	<1,200	<120	<120	<620	<120
IRZCMW002	C		Baseline	10/8/2003	<100	4,600	<100	<100	<100	39 J	<100	<100	<1,000	<100	36 J	<500	<100	
			Week 12	1/5/2005	<120	5,200	<120	<120	<120	<120	<120	<120	<1,200	<120	<120	<620	<120	
			Week 21	3/19/2005	<120	7,700	<120	<120	<120	<120	38 J	<120	<120	<1,200	<120	<120	<620	<120
			Week 36	6/15/2005	<50	87	4,800	25 J	<50	<50	32 J	<50	<50	<500	<50	<50	<250	<50
CMW001	C		Baseline	10/9/2003	<120	<120	<120	<120	<120	<120	<120	<120	<1,200	7,300	60 J	<620	<120	
			Week 12	1/5/2005	<250	<250	<250	<250	<250	<250	<250	<250	<2,500	12,000	<250	<1,200	<250	
			Week 21	3/18/2005(c)	<400	<400	<400	<400	<400	<400	<400	<400	<4,000	15,000	<400	<2,000	<400	
			Week 36	6/15/2005	<120	<120	<120	<120	<120	<120	<120	<120	<1,200	9,000	<120	<620	<120	
CMW002	C		Baseline	10/8/2003	<100	460	<100	<100	<100	<100	<100	<100	<1,000	3,600	<100	<500	<100	
			Week 12	1/3/2005	<120	330	<120	<120	<120	<120	<120	<120	<1,200	4,900	<120	<620	<120	
			Week 21	3/18/2005(c)	<100	390	<100	<100	<100	<100	<100	<100	<1,000	6,300	<100	<500	<100	
			Week 36	6/15/2005	<100	430	<100	<100	<100	<100	<100	<100	<1,000	7,400	<100	<500	<100	
IRZCMW001	D		Baseline	10/8/2003	<62	1,300	22 J	<62	<62	<62	350	13 J	<62	210 J	<62	76	<310	<62
			Week 6	11/18/2004	<12	920	15	6.3 J	<12	4.7 J	200	8.6 J	6.4 J	<120	<12	44	<62	<12
			Week 12	1/4/2005	<25	1,000	16 J	<25	<25	<12	250	8.4 J	<25	<250	<25	41	<120	<25
			Week 21	3/19/2005	<25	1,600	24 J	12 J	<25	8.6 J	420	15 J	11 J	<250	<25	55	<120	<25
EPA Analytical Method				8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	

Notes:

Group A: wells located within the estimated injection area

Group B: wells located at the estimated edge of the injection area

Group C: wells located downgradient of the treatment area

Group D: wells located upgradient of the treatment area

ug/L - micrograms per liter

< - not detected above indicated reporting limit

PCE - tetrachloroethene

TCE - trichloroethene

DCE - dichloroethene

TCA - trichloroethane

DCA - dichloroethane

J - estimated result less than reporting limit

JB - acetone detected at 11 ug/L in trip blank

(a) 2-Hexanone was also detected at a concentration of 2,000 ug/L.

(b) Methyl tert-butyl ether was also detected at an estimated concentration of 3.9 ug/L.

(c) Benzene was also detected at a concentration of 38 ug/L.

Table 4. Permanent Gas Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Dissolved Oxygen (mg/L)	Carbon Dioxide (mg/L)	Nitrogen (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	
IRZB0081	Zone B	A	Baseline	10/9/2003	3.7	16.9	12.6	<0.2	0.06	0.11	
			Week 12	1/5/2005	2.0	750	6.8	184	0.03	0.10	
			Week 16	1/28/2005	<0.25	800	5.3	3.1	0.12	0.20	
			Week 21	3/20/2005	0.34	790	5.7	5,300	0.03	0.17	
		A	Baseline	10/7/2003	2.7	14.0	8.7	<0.2	0.05	0.08	
			Week 6	11/19/2004	2.9	10.8	7.8	1.1	0.02	0.02	
			Week 12	1/5/2005	0.30	253	6.0	3.9	0.05	0.25	
			Week 16	1/28/2005	0.47	320	12	0.19	0.86	0.41	
			Week 21	3/20/2005	2.7	160	23	3,100	0.01	0.34	
IRZMW001A		A	Baseline	10/30/2003	1.2	27	10	2.9	0.07	0.05	
			Week 6	11/18/2004	0.48	27	3.7	1.8	0.01	<0.01	
			Week 12	1/4/2005	0.49	42	5.9	488	0.01	0.02	
			Week 16	1/27/2005	2.0	55	16	2.6	0.03	0.09	
			Week 21	3/19/2005	3.3	74	18	5,600	<0.005	<0.005	
		A	Baseline	10/30/2003	4.1	21	12	0.4	0.04	0.02	
			Week 6	11/18/2004	3.3	15	7.9	<0.2	0.01	<0.01	
			Week 12	1/4/2005	4.9	17	12	0.3	0.02	0.01	
			Week 16	1/27/2005	NS	NS	NS	NS	NS	NS	
			Week 21	3/19/2005	8.8	26	22	74	0.03	0.02	
IRZMW002A		A	Baseline	10/30/2003	0.62	39	8.7	4.0	1.2	3.3	
			Week 6	11/18/2004	0.53	103	2.5	5.2	0.02	0.12	
			Week 12	1/4/2005	1.8	48	5.2	5.0	0.04	0.25	
			Week 16	1/27/2005	5.1	53	17	0.02	0.08	0.07	
			Week 21	3/19/2005	5.6	66	18	230	0.08	1.1	
IRZMW002B		A	Baseline	10/30/2003	3.4	17	16	6.0	1.3	2.1	
			Week 6	11/18/2004	1.6	14	4.7	1.3	0.02	0.02	
			Week 12	1/4/2005	3.2	17	9.4	1.8	0.02	0.01	
			Week 16	1/27/2005	4.5	20	16	0.01	0.04	0.18	
			Week 21	3/19/2005	3.0	91	26	24	0.07	0.12	
IRZMW005		A	Baseline	10/9/2003	5.0	16	14	<0.2	0.06	0.07	
			Week 6	11/19/2004	0.24	208	3.6	234	<0.01	0.02	
			Week 12	1/5/2005	2.8	362	15	3,998	0.03	0.32	
			Week 16	1/28/2005	0.81	270	13	3.6	0.07	0.25	
			Week 21	3/20/2005	2.3	380	14	10,000	<0.005	0.79	
IRZMW003A		B	Baseline	10/31/2003	3.1	25	16	0.5	0.17	0.10	
			Week 12	1/4/2005	3.6	156	16	913	0.01	0.08	
			Week 16	1/27/2005	2.5	160	15	3.1	<0.005	0.09	
			Week 21	3/19/2005	5.9	150	26	3,600	<0.005	0.04	
IRZMW003B		B	Baseline	10/31/2003	3.7	18	12	0.7	0.09	0.08	
			Week 12	1/4/2005	4.0	18	12	32	0.01	0.01	
			Week 16	1/27/2005	7.0	20	22	0.01	<0.005	0.03	
			Week 21	3/19/2005	6.6	21	24	92	0.02	0.02	
IRZMW004		C	Baseline	10/7/2003	2.7	15	8.4	0.30	0.05	0.06	
			Week 12	1/5/2005	3.1	17	10	2.2	0.02	0.01	
			Week 21	3/20/2005	6.5	38	27	21	0.08	0.22	
			Week 36	6/15/2005	2.9	42	20	67	0.05	0.12	
CMW026	Zone C	A	Baseline	10/7/2003	2.5	6.7	15	0.90	0.52	0.04	
			Week 6	11/19/2004	0.27	14	8.2	1,994	<0.01	0.21	
			Week 12	1/5/2005	0.89	3.4	5.5	2,038	<0.005	0.11	
			Week 16	1/28/2005	2.4	45	11	17	<0.005	0.42	
			Week 21	3/19/2005	7.6	7.8	25	2,100	0.01	0.35	
IRZCMW003		B	Baseline	10/7/2003	1.1	7.1	12	1.6	0.95	0.88	
			Week 12	1/5/2005	0.93	12	15	4.3	0.02	0.05	
			Week 16	1/28/2005	3.2	11	21	0.01	0.08	0.11	
			Week 21	3/19/2005	5.8	13	33	22	0.04	0.17	

Table 4. Permanent Gas Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Dissolved Oxygen (mg/L)	Carbon Dioxide (mg/L)	Nitrogen (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
IRZCMW002	Zone C	C	Baseline	10/8/2003	0.94	7.2	15	0.6	0.43	1.2
			Week 12	1/5/2005	0.83	6.8	9.9	0.3	0.03	0.02
			Week 21	3/19/2005	1.9	5.5	26	4.9	0.08	0.51
			Week 36	6/15/2005	0.8	30	17	59	0.09	0.67
		C	Baseline	10/9/2003	1.7	9.1	13	4.8	1.5	2.3
			Week 12	1/5/2005	0.94	12	10	13	0.25	0.44
			Week 21	3/18/2005	3.1	15	22	22	0.42	0.35
			Week 36	6/15/2005	2.3	10	19	6.3	0.22	0.30
		C	Baseline	10/8/2003	2.5	11	16	0.90	0.14	1.04
			Week 12	1/3/2005	1.1	12	11	0.80	0.13	0.12
			Week 21	3/18/2005	5.9	15	31	14	0.24	0.08
			Week 36	6/15/2005	4.4	15	21	3.3	0.24	0.07
IRZCMW001		D	Baseline	10/8/2003	3.1	13	15	0.3	0.11	0.18
			Week 6	11/18/2004	0.98	13	7.1	503	<0.01	0.07
			Week 12	1/4/2005	0.72	17	11	6,810	<0.005	0.18
			Week 21	3/19/2005	3.3	19	16	11,000	<0.005	0.31
Analytical Method				RSK 175	RSK 175	RSK 175	RSK 175	RSK 175	RSK 175	RSK 175

Notes:

- Group A: wells located within the estimated injection area
- Group B: wells located at the estimated edge of the injection area
- Group C: wells located downgradient of the treatment area
- Group D: wells located upgradient of the treatment area

mg/L - milligrams per liter

µg/L - micrograms per liter

< - Not detected above indicated reporting limit

NS - Not Sampled

APPENDIX A



ARCADIS

Appendix A

Laboratory Reports and Chain of Custody Documents

SEVERN
TRENT

STL

June 27, 2005

STL LOT NUMBER: E5F170101
NELAP Certification Number: 01118CA/E87652
PO/CONTRACT: 050160-SEV01-002

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

Eric Lothman
ARCADIS Geraghty & Miller, Inc
1400 N. Harbor Blvd.
Suite 700
Fullerton, CA 92835-4127

Dear Mr. Lothman,

This report contains the analytical results for the five samples received under chain of custody by STL Los Angeles on June 16, 2005. These samples are associated with your Boeing former C6 facility Torrance, California project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 325.

Sincerely,



Diane Suzuki
Project Manager

CC: Project File

000063
Page 1 of _____ total pages in this report.



Severn Trent Laboratories, Inc.

Leaders in Environmental Testing

000001

BOE-C6-0105137

LOT NUMBER E5F170101

Nonconformance 05-12913

Affected Samples:

E5F170101 (1): TRIP BLANK_WG061505_01

E5F170101 (2): IRZMW004_WG061505_01

Affected Methods:

None specified.

Case Narrative:

One VOA vials from samples above contain bubbles > 6mm in diameter. Analysis is performed on a VOA vial without headspace when available.

Nonconformance 05-13010

Affected Samples:

E5F170101 (2): IRZMW004_WG061505_01

E5F170101 (3): IRZCMW002_WG061505_01

E5F170101 (4): CMW001_WG061505_01

E5F170101 (5): CMW002_WG061505_01

Affected Methods:

6010B

Case Narrative:

Samples were received unfiltered and unpreserved for Dissolved Metals Analysis. Per client request, the samples were filtered and preserved to a pH <2 with Nitric Acid prior to metals digestion.



000002

BOE-C6-0105138

Chain of
Custody Record

SEVERN
TRENT

STL

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client ARCADIS	Project Manager ERIC LOTHMAN	Date 6/15/05	Chain of Custody Number 220247
Address 1400 N. HARBOR BLVD. SUITE 700		Telephone Number (Area Code)/Fax Number (714) 278-0992 / (714) 278-0051	
City FULLERTON	State CA	Zip Code 92835	Lab Number ESF170101

Project Name and Location (State) BOEN C-6 CA	Site Contact STEPHEN GYAMFI	Lab Contact DIANA SUBUYI	Analysis (Attach list if more space is needed)
Carrier/Waybill Number BOEN C-6			

Contract/Purchase Order/Quote No. BOEN C-6			Matrix	Containers & Preservatives	Special Instructions/ Conditions of Receipt <i>(See Comments)</i>	
			Air Aqueous Sed Soil	Unpres. H ₂ SO ₄ HNO ₃ HCl NaOH ZnAc NaOH	8260 TOTAL MANGANESE TOTAL IRON BROMIDE BROMATE CHLORIDE Dissolved Mn TOC	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air Aqueous Sed Soil	Unpres. H ₂ SO ₄ HNO ₃ HCl NaOH ZnAc NaOH	8260 TOTAL MANGANESE TOTAL IRON BROMIDE BROMATE CHLORIDE Dissolved Mn TOC
TRIP BLANK-WG061505-01	6/15/05	—	X	X X X	X X X X X X X X X X
IR2MW004-WG061505-1	6/15/05	1625	X	X X X	X X X X X X X X X X
IR2CMW002-WG061505-01	6/15/05	1759	X	X X X	X X X X X X X X X X
CMW001-WG061505-01	6/15/05	1908	X	X X X	X X X X X X X X X X
CMW002-WG061505-01	6/15/05	2008	X	X X X	X X X X X X X X X X

Possible Hazard Identification	Sample Disposal	(A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
Turn Around Time Required			
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input checked="" type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____	QC Requirements (Specify)		

1. Relinquished By STEPHEN A. GYAMFI	Date 6/15/05	Time 2300	1. Received By Eric Lothman	Date 6/16/05	Time 6:35 am
2. Relinquished By Eric Lothman	Date 6/16/05	Time 1345	2. Received By Vince Pachillo	Date 6/16/05	Time 1345
3. Relinquished By Vince Pachillo	Date 6/16/05	Time 1430	3. Received By Mark Brown	Date 6/16/05	Time 14:30
Comments LAB TO FILTER (DISSOLVED MANGANESE)					
DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy					

STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 6-16-05

LIMS Lot #: ESF170101

Quote #: 48735

Client Name: Arcadis AGM

Project: Boeing C-6

Received by: ML

Date/Time Received: 6-16-05 / 14:30

Delivered by: Client STL DHL Fed Ex UPS Other _____

***** Initial / Date

Custody Seal Status Cooler: Intact Broken None 16-6-16-05

Custody Seal Status Samples: Intact Broken None _____

Custody Seal #(s): _____ No Seal # _____

Sampler Signature on COC Yes No N/A

IR Gun # B Correction Factor + .4 °C IR passed daily verification Yes No

Temperature - BLANK 24 °C +/- .4 CF = 3.0 °C

Temperature - COOLER (°C °C °C °C) = avg °C +/- CF = °C

Samples outside temperature criteria but received within 6 hours of final sampling Yes N/A

Sample Container(s): STL-LA Client

One COC/Multiple coolers: Yes - # coolers All within temp criteria Yes No N/A

One or more coolers with an anomaly: Yes - (fill out PRC for each) N/A

Samples: Intact Broken Other

pH measured: Yes Anomaly (if checked, notify lab and file NCM) N/A

Anomalies: No Yes - complete CUR and Create NCM NCM #

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. Yes N/A

Labeled by: ML Labeling checked

Turn Around Time: RUSH-24HR RUSH-48HR RUSH-72HR NORMAL

Short-Hold Notification: pH Wet Chem Metals (Filter/Pres) Encore >1/2 HT expired...

Outside Analysis(es) (Test/Lab/Date Sent Out): NA

***** LEAVE NO BLANK SPACES ; USE N/A *****

16-6-16-05

Headspace Anomaly				<input type="checkbox"/> N/A <u>16-6-16-05</u>	
Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace
001	1	<input checked="" type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
002	1	<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input checked="" type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm			<input type="checkbox"/> > 6mm

Fraction	1	2-5									
VOAH/*	3	3									
ILPB		1									
500DBn		1									
250A6BS		1									

* VOA with headspace/bubbles < 6mm

H: HCl, S: H₂SO₄, N: HNO₃, V: VOA, SL: Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore AGB: Amber Glass Bottle, n/f/l:HNO₃-Lab filtered, n/f:HNO₃-Field filtered, zma: Zinc Acetate/Sodium Hydroxide, Na₂s₂O₃: sodium thiosulfate

Condition Upon Receipt Anomaly Form		
<input type="checkbox"/> N/A <i>Me 6-16-05</i>		
<ul style="list-style-type: none"> COOLERS <ul style="list-style-type: none"> <input type="checkbox"/> Not Received (received COC only) <input type="checkbox"/> Leaking <input type="checkbox"/> Other: TEMPERATURE (SPECS $4 \pm 2^\circ\text{C}$) <ul style="list-style-type: none"> <input type="checkbox"/> Cooler Temp(s) <input type="checkbox"/> Temperature Blank(s) CONTAINERS <ul style="list-style-type: none"> <input type="checkbox"/> Leaking <i>N</i>Vials with Bubbles > 6mm <input type="checkbox"/> Broken <input type="checkbox"/> Extra <input type="checkbox"/> Without Labels <input type="checkbox"/> Other: SAMPLES <ul style="list-style-type: none"> <input type="checkbox"/> Samples NOT RECEIVED but listed on COC <input type="checkbox"/> Samples received but NOT LISTED on COC <input type="checkbox"/> Logged based on Label Information <input type="checkbox"/> Logged based on info from other samples on COC <input type="checkbox"/> Logged according to Work Plan <input type="checkbox"/> Logged on HOLD UNTIL FURTHER NOTICE 		
<ul style="list-style-type: none"> CUSTODY SEALS (COOLER(S)) <ul style="list-style-type: none"> <input type="checkbox"/> None <input type="checkbox"/> Not Intact <input type="checkbox"/> Other CONTAINER(S) <ul style="list-style-type: none"> <input type="checkbox"/> None <input type="checkbox"/> Not Intact <input type="checkbox"/> Other CHAIN OF CUSTODY (COC) <ul style="list-style-type: none"> <input type="checkbox"/> Not relinquished by Client; No date/time relinquished <input type="checkbox"/> Incomplete information provided <input type="checkbox"/> Other <input type="checkbox"/> COC not received – notify PM LABELS <ul style="list-style-type: none"> <input type="checkbox"/> Not the same ID/info as in COC <input type="checkbox"/> Incomplete Information <input type="checkbox"/> Markings/Info illegible <input type="checkbox"/> Torn <ul style="list-style-type: none"> <input type="checkbox"/> Will be noted on COC–Client to send samples with new COC <input type="checkbox"/> Mislabeled as to tests, preservatives, etc. <input type="checkbox"/> Holding time expired – list sample ID and test <input type="checkbox"/> Improper container used <input type="checkbox"/> Not preserved/Improper preservative used <input type="checkbox"/> Improper pH _____ Lab to preserve sample and document <input type="checkbox"/> Insufficient quantities for analysis <input type="checkbox"/> Other 		
<p>Comments:</p> <p><i>Received Vials with headspace > 6mm for Sample #1, container #1; Sample #2, container #1.</i></p> <hr/> <hr/> <hr/> <hr/> <hr/>		
<p><input type="checkbox"/> Corrective Action Implemented:</p> <p><input type="checkbox"/> Client Informed: verbally on _____</p> <p><input type="checkbox"/> Sample(s) on hold until: _____</p>		
<p>By: _____ <input type="checkbox"/> In writing on _____ By: _____</p> <p><input type="checkbox"/> Sample(s) processed "as is."</p>		
<p>Logged by/Date: <i>Me 6-16-05</i></p> <p>PM Review/Date: <i>MWC 6/17/05</i></p>		

SEVERN
TRENT

STL

Analytical Report

EXECUTIVE SUMMARY - Detection Highlights

ESF170101

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
IRZMW004_WG061505_01 06/15/05 16:25	002			
Manganese - DISSOLVED	0.21 J	0.015	mg/L	SW846 6010B
Manganese	0.23	0.015	mg/L	SW846 6010B
Iron	2.2	0.10	mg/L	SW846 6010B
Chloroform	83 J	120	ug/L	SW846 8260B
1,1-Dichloroethene	110 J	120	ug/L	SW846 8260B
cis-1,2-Dichloroethene	840	120	ug/L	SW846 8260B
Trichloroethene	7100	120	ug/L	SW846 8260B
Chloride	284	10.0	mg/L	MCAWW 300.0A
Sulfate	38.1	1.0	mg/L	MCAWW 300.0A
Nitrate as N	6.3	0.10	mg/L	MCAWW 300.0A
Total Organic Carbon (TOC)	23.5	1.0	mg/L	SW846 9060
Bromide	0.79	0.50	mg/L	MCAWW 300.0A
IRZCMW002_WG061505_01 06/15/05 17:59	003			
Manganese - DISSOLVED	2.4 J	0.015	mg/L	SW846 6010B
Manganese	2.8	0.015	mg/L	SW846 6010B
Iron	1.2	0.10	mg/L	SW846 6010B
2-Butanone	210 J	250	ug/L	SW846 8260B
Carbon disulfide	36 J	50	ug/L	SW846 8260B
1,1-Dichloroethene	32 J	50	ug/L	SW846 8260B
cis-1,2-Dichloroethene	4800	50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	25 J	50	ug/L	SW846 8260B
Trichloroethene	87	50	ug/L	SW846 8260B
Chloride	152	10.0	mg/L	MCAWW 300.0A
Sulfate	3.6	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon (TOC)	157	10.0	mg/L	SW846 9060
Bromide	0.19 B	0.50	mg/L	MCAWW 300.0A
CMMW001_WG061505_01 06/15/05 19:08	004			
Manganese - DISSOLVED	0.21 J	0.015	mg/L	SW846 6010B
Manganese	0.23	0.015	mg/L	SW846 6010B
Iron	0.16	0.10	mg/L	SW846 6010B
Chlorobenzene	9000	120	ug/L	SW846 8260B
Chloride	87.8	5.0	mg/L	MCAWW 300.0A
Sulfate	99.0	5.0	mg/L	MCAWW 300.0A
Total Organic Carbon (TOC)	15.8	1.0	mg/L	SW846 9060
Bromide	0.22 B	0.50	mg/L	MCAWW 300.0A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E5F170101

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CMW002_WG061505_01 06/15/05 20:08 005				
Manganese - DISSOLVED	0.13 J	0.015	mg/L	SW846 6010B
Manganese	0.15	0.015	mg/L	SW846 6010B
Iron	0.18	0.10	mg/L	SW846 6010B
Benzene	50 J	100	ug/L	SW846 8260B
Chlorobenzene	7400	100	ug/L	SW846 8260B
Trichloroethene	430	100	ug/L	SW846 8260B
Chloride	110	5.0	mg/L	MCAWW 300.0A
Sulfate	89.1	5.0	mg/L	MCAWW 300.0A
Total Organic Carbon (TOC)	13.3	1.0	mg/L	SW846 9060
Bromide	0.24 B	0.50	mg/L	MCAWW 300.0A

METHODS SUMMARY

E5F170101

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Bromide	MCAWW 300.0A	MCAWW 300.0A
Chloride	MCAWW 300.0A	MCAWW 300.0A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3005A
Nitrate as N	MCAWW 300.0A	MCAWW 300.0A
Nitrite as N	MCAWW 300.0A	MCAWW 300.0A
Sulfate	MCAWW 300.0A	MCAWW 300.0A
Total Organic Carbon	SW846 9060	SW846 9060
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E5F170101

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
HDR05	001	TRIP BLANK_WG061505_01	06/15/05	
HDR06	002	IRZMW004_WG061505_01	06/15/05	16:25
HDR07	003	IRZCMW002_WG061505_01	06/15/05	17:59
HDR08	004	CMW001_WG061505_01	06/15/05	19:08
HDR09	005	CMW002_WG061505_01	06/15/05	20:08

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: TRIP BLANK_WG061505_01

GC/MS Volatiles

Lot-Sample #....: E5F170101-001 Work Order #....: HDR051AA Matrix.....: WG
 Date Sampled....: 06/15/05 Date Received...: 06/16/05 14:30 MS Run #....: 5171380
 Prep Date.....: 06/17/05 Analysis Date...: 06/17/05
 Prep Batch #....: 5171669 Analysis Time...: 19:21
 Dilution Factor: 1
 Analyst ID.....: 015590 Instrument ID...: MSQ
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	3.0
Benzene	ND	1.0	ug/L	0.30
Bromobenzene	ND	1.0	ug/L	0.30
Bromochloromethane	ND	1.0	ug/L	0.30
Bromoform	ND	1.0	ug/L	0.30
Bromomethane	ND	2.0	ug/L	1.0
2-Butanone	ND	5.0	ug/L	3.0
n-Butylbenzene	ND	1.0	ug/L	0.30
sec-Butylbenzene	ND	1.0	ug/L	0.30
tert-Butylbenzene	ND	1.0	ug/L	0.20
Carbon disulfide	ND	1.0	ug/L	0.30
Carbon tetrachloride	ND	1.0	ug/L	0.30
Chlorobenzene	ND	1.0	ug/L	0.30
Dibromochloromethane	ND	1.0	ug/L	0.40
Bromodichloromethane	ND	1.0	ug/L	0.30
Chloroethane	ND	2.0	ug/L	0.30
Chloroform	ND	1.0	ug/L	0.30
Chloromethane	ND	2.0	ug/L	0.30
2-Chlorotoluene	ND	1.0	ug/L	0.30
4-Chlorotoluene	ND	1.0	ug/L	0.30
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.70
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.30
Dibromomethane	ND	1.0	ug/L	0.40
1,2-Dichlorobenzene	ND	1.0	ug/L	0.30
1,3-Dichlorobenzene	ND	1.0	ug/L	0.30
1,4-Dichlorobenzene	ND	1.0	ug/L	0.30
Dichlorodifluoromethane	ND	2.0	ug/L	0.40
1,1-Dichloroethane	ND	1.0	ug/L	0.20
1,2-Dichloroethane	ND	1.0	ug/L	0.40
1,1-Dichloroethene	ND	1.0	ug/L	0.30
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.30
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.30
1,2-Dichloropropane	ND	1.0	ug/L	0.30
1,3-Dichloropropane	ND	1.0	ug/L	0.40
2,2-Dichloropropane	ND	1.0	ug/L	0.30
1,1-Dichloropropene	ND	1.0	ug/L	0.30

(Continued on next page)

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: TRIP BLANK_WG061505_01

GC/MS Volatiles

Lot-Sample #....: E5F170101-001 Work Order #....: HDR051AA Matrix.....: WG

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.30
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.50
Ethylbenzene	ND	1.0	ug/L	0.20
Hexachlorobutadiene	ND	1.0	ug/L	0.30
2-Hexanone	ND	5.0	ug/L	3.0
Isopropylbenzene	ND	1.0	ug/L	0.30
p-Isopropyltoluene	ND	1.0	ug/L	0.30
Methylene chloride	ND	1.0	ug/L	0.30
4-Methyl-2-pentanone	ND	5.0	ug/L	3.0
Methyl tert-butyl ether	ND	1.0	ug/L	0.50
Naphthalene	ND	1.0	ug/L	0.50
n-Propylbenzene	ND	1.0	ug/L	0.40
Styrene	ND	1.0	ug/L	0.30
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.30
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.40
Tetrachloroethene	ND	1.0	ug/L	0.30
Toluene	ND	1.0	ug/L	0.30
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.40
1,2,4-Trichloro- benzene	ND	1.0	ug/L	0.30
1,1,1-Trichloroethane	ND	1.0	ug/L	0.20
1,1,2-Trichloroethane	ND	1.0	ug/L	0.30
Trichloroethene	ND	1.0	ug/L	0.30
Trichlorofluoromethane	ND	2.0	ug/L	0.30
1,2,3-Trichloropropane	ND	1.0	ug/L	0.40
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L	0.40
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.30
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.20
Vinyl chloride	ND	1.0	ug/L	0.30
m-Xylene & p-Xylene	ND	1.0	ug/L	0.50
o-Xylene	ND	1.0	ug/L	0.20
Xylenes (total)	ND	1.0	ug/L	0.80
SURROGATE		PERCENT	RECOVERY	
		RECOVERY	LIMITS	
Bromofluorobenzene	96		(75 - 130)	
1,2-Dichloroethane-d4	124		(65 - 135)	
Toluene-d8	101		(80 - 130)	

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZMW004_WG061505_01

GC/MS Volatiles

Lot-Sample #....: E5F170101-002 Work Order #....: HDR061AL Matrix.....: WG
 Date Sampled....: 06/15/05 16:25 Date Received...: 06/16/05 14:30 MS Run #.....: 5172359
 Prep Date.....: 06/20/05 Analysis Date...: 06/20/05
 Prep Batch #....: 5172578 Analysis Time...: 22:50
 Dilution Factor: 125
 Analyst ID.....: 015590 Instrument ID...: MSR
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	1200	ug/L	380
Benzene	ND	120	ug/L	38
Bromobenzene	ND	120	ug/L	38
Bromochloromethane	ND	120	ug/L	38
Bromoform	ND	120	ug/L	38
Bromomethane	ND	250	ug/L	120
2-Butanone	ND	620	ug/L	380
n-Butylbenzene	ND	120	ug/L	38
sec-Butylbenzene	ND	120	ug/L	38
tert-Butylbenzene	ND	120	ug/L	25
Carbon disulfide	ND	120	ug/L	38
Carbon tetrachloride	ND	120	ug/L	38
Chlorobenzene	ND	120	ug/L	38
Dibromochloromethane	ND	120	ug/L	50
Bromodichloromethane	ND	120	ug/L	38
Chloroethane	ND	250	ug/L	38
Chloroform	83 J	120	ug/L	38
Chloromethane	ND	250	ug/L	38
2-Chlorotoluene	ND	120	ug/L	38
4-Chlorotoluene	ND	120	ug/L	38
1,2-Dibromo-3-chloro-propane	ND	250	ug/L	88
1,2-Dibromoethane (EDB)	ND	120	ug/L	38
Dibromomethane	ND	120	ug/L	50
1,2-Dichlorobenzene	ND	120	ug/L	38
1,3-Dichlorobenzene	ND	120	ug/L	38
1,4-Dichlorobenzene	ND	120	ug/L	38
Dichlorodifluoromethane	ND	250	ug/L	50
1,1-Dichloroethane	ND	120	ug/L	25
1,2-Dichloroethane	ND	120	ug/L	50
1,1-Dichloroethene	110 J	120	ug/L	38
cis-1,2-Dichloroethene	840	120	ug/L	38
trans-1,2-Dichloroethene	ND	120	ug/L	38
1,2-Dichloropropane	ND	120	ug/L	38
1,3-Dichloropropane	ND	120	ug/L	50
2,2-Dichloropropane	ND	120	ug/L	38
1,1-Dichloropropene	ND	120	ug/L	38

(Continued on next page)

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZMW004_WG061505_01

GC/MS Volatiles

Lot-Sample #....: E5F170101-002 Work Order #....: HDR061AL Matrix.....: WG

PARAMETER	RESULT	REPORTING		MDL
		LIMIT	UNITS	
cis-1,3-Dichloropropene	ND	120	ug/L	38
trans-1,3-Dichloropropene	ND	120	ug/L	62
Ethylbenzene	ND	120	ug/L	25
Hexachlorobutadiene	ND	120	ug/L	38
2-Hexanone	ND	620	ug/L	380
Isopropylbenzene	ND	120	ug/L	38
p-Isopropyltoluene	ND	120	ug/L	38
Methylene chloride	ND	120	ug/L	38
4-Methyl-2-pentanone	ND	620	ug/L	380
Methyl tert-butyl ether	ND	120	ug/L	62
Naphthalene	ND	120	ug/L	62
n-Propylbenzene	ND	120	ug/L	50
Styrene	ND	120	ug/L	38
1,1,1,2-Tetrachloroethane	ND	120	ug/L	38
1,1,2,2-Tetrachloroethane	ND	120	ug/L	50
Tetrachloroethene	ND	120	ug/L	38
Toluene	ND	120	ug/L	38
1,2,3-Trichlorobenzene	ND	120	ug/L	50
1,2,4-Trichloro- benzene	ND	120	ug/L	38
1,1,1-Trichloroethane	ND	120	ug/L	25
1,1,2-Trichloroethane	ND	120	ug/L	38
Trichloroethene	7100	120	ug/L	38
Trichlorofluoromethane	ND	250	ug/L	38
1,2,3-Trichloropropane	ND	120	ug/L	50
1,1,2-Trichlorotrifluoro- ethane	ND	120	ug/L	50
1,2,4-Trimethylbenzene	ND	120	ug/L	38
1,3,5-Trimethylbenzene	ND	120	ug/L	25
Vinyl chloride	ND	120	ug/L	38
m-Xylene & p-Xylene	ND	120	ug/L	62
o-Xylene	ND	120	ug/L	25
Xylenes (total)	ND	120	ug/L	100
 SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS	
Bromofluorobenzene	97		(75 - 130)	
1,2-Dichloroethane-d4	114		(65 - 135)	
Toluene-d8	108		(80 - 130)	

NOTE(S) :

J Estimated result. Result is less than RL.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZMW004_WG061505_01

TOTAL Metals

Lot-Sample #....: E5F170101-002 **Matrix.....: WG**
Date Sampled...: 06/15/05 16:25 **Date Received..: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ANALYSIS DATE	ORDER #
		LIMIT	UNITS						
Prep Batch #....: 5172210									
Manganese	0.23	0.015	mg/L		SW846 6010B	06/21-06/22/05	HDR061AJ		
		Dilution Factor: 1			Analysis Time...: 13:06		Analyst ID.....: 021088		
		Instrument ID...: M01			MS Run #.....: 5173249		MDL.....: 0.0010		
Iron	2.2	0.10	mg/L		SW846 6010B	06/21-06/22/05	HDR061AM		
		Dilution Factor: 1			Analysis Time...: 13:06		Analyst ID.....: 021088		
		Instrument ID...: M01			MS Run #.....: 5173249		MDL.....: 0.030		

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZMW004_WG061505_01

DISSOLVED Metals

Lot-Sample #....: E5F170101-002 **Matrix.....: WG**
Date Sampled....: 06/15/05 16:25 **Date Received...: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS	 			
Prep Batch #....: 5168217							
Manganese	0.21 J	0.015	mg/L		SW846 6010B	06/20-06/21/05	HDR061AH
		Dilution Factor: 1			Analysis Time...: 12:52	Analyst ID.....: 021088	
		Instrument ID...: M01			MS Run #.....: 5168147	MDL.....: 0.0010	

NOTE (S) :

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZMW004_WG061505_01

General Chemistry

Lot-Sample #....: E5F170101-002 Work Order #....: HDR06 Matrix.....: WG
 Date Sampled...: 06/15/05 16:25 Date Received..: 06/16/05 14:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP BATCH #
					ANALYSIS DATE		
Bromide	0.79	0.50	mg/L	MCAWW 300.0A	06/17/05		5168091
		Dilution Factor: 1		Analysis Time...: 07:00		Analyst ID.....: 000022	
		Instrument ID...: W01		MS Run #.....: 5168054		MDL.....: 0.10	
chloride	284	10.0	mg/L	MCAWW 300.0A	06/17/05		5168088
		Dilution Factor: 10		Analysis Time...: 09:57		Analyst ID.....: 0000224	
		Instrument ID...: W01		MS Run #.....: 5168052		MDL.....: 3.0	
Nitrate as N	6.3	0.10	mg/L	MCAWW 300.0A	06/17/05		5168093
		Dilution Factor: 1		Analysis Time...: 07:00		Analyst ID.....: 0000222	
		Instrument ID...: W01		MS Run #.....: 5168055		MDL.....: 0.030	
Nitrite as N	ND G	1.0	mg/L	MCAWW 300.0A	06/17/05		5168090
		Dilution Factor: 10		Analysis Time...: 09:57		Analyst ID.....: 0000225	
		Instrument ID...: W01		MS Run #.....: 5168053		MDL.....: 0.30	
Sulfate	38.1	1.0	mg/L	MCAWW 300.0A	06/17/05		5168094
		Dilution Factor: 1		Analysis Time...: 07:00		Analyst ID.....: 0000223	
		Instrument ID...: W01		MS Run #.....: 5168056		MDL.....: 0.20	
Total Organic Carbon (TOC)	23.5	1.0	mg/L	SW846 9060	06/17/05		5171406
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 9999956	
		Instrument ID...: W08		MS Run #.....: 5171311		MDL.....: 0.40	

NOTE(S) :

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZCMW002_WG061505_01

GC/MS Volatiles

Lot-Sample #....: E5F170101-003 Work Order #....: HDR071AL Matrix.....: WG
 Date Sampled...: 06/15/05 17:59 Date Received..: 06/16/05 14:30 MS Run #.....: 5171380
 Prep Date.....: 06/17/05 Analysis Date...: 06/17/05
 Prep Batch #....: 5171669 Analysis Time...: 22:51
 Dilution Factor: 50
 Analyst ID.....: 015590 Instrument ID...: MSQ
 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Acetone	ND	500	ug/L	150
Benzene	ND	50	ug/L	15
Bromobenzene	ND	50	ug/L	15
Bromochloromethane	ND	50	ug/L	15
Bromoform	ND	50	ug/L	15
Bromomethane	ND	100	ug/L	50
2-Butanone	210 J	250	ug/L	150
n-Butylbenzene	ND	50	ug/L	15
sec-Butylbenzene	ND	50	ug/L	15
tert-Butylbenzene	ND	50	ug/L	10
Carbon disulfide	36 J	50	ug/L	15
Carbon tetrachloride	ND	50	ug/L	15
Chlorobenzene	ND	50	ug/L	15
Dibromochloromethane	ND	50	ug/L	20
Bromodichloromethane	ND	50	ug/L	15
Chloroethane	ND	100	ug/L	15
Chloroform	ND	50	ug/L	15
Chloromethane	ND	100	ug/L	15
2-Chlorotoluene	ND	50	ug/L	15
4-Chlorotoluene	ND	50	ug/L	15
1,2-Dibromo-3-chloro-propane	ND	100	ug/L	35
1,2-Dibromoethane (EDB)	ND	50	ug/L	15
Dibromomethane	ND	50	ug/L	20
1,2-Dichlorobenzene	ND	50	ug/L	15
1,3-Dichlorobenzene	ND	50	ug/L	15
1,4-Dichlorobenzene	ND	50	ug/L	15
Dichlorodifluoromethane	ND	100	ug/L	20
1,1-Dichloroethane	ND	50	ug/L	10
1,2-Dichloroethane	ND	50	ug/L	20
1,1-Dichloroethene	32 J	50	ug/L	15
cis-1,2-Dichloroethene	4800	50	ug/L	15
trans-1,2-Dichloroethene	25 J	50	ug/L	15
1,2-Dichloropropane	ND	50	ug/L	15
1,3-Dichloropropane	ND	50	ug/L	20
2,2-Dichloropropane	ND	50	ug/L	15
1,1-Dichloropropene	ND	50	ug/L	15

(Continued on next page)

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZCMW002_WG061505_01

GC/MS Volatiles

Lot-Sample #...: E5F170101-003 Work Order #...: HDR071AL Matrix.....: WG

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
cis-1,3-Dichloropropene	ND	50	ug/L	15
trans-1,3-Dichloropropene	ND	50	ug/L	25
Ethylbenzene	ND	50	ug/L	10
Hexachlorobutadiene	ND	50	ug/L	15
2-Hexanone	ND	250	ug/L	150
Isopropylbenzene	ND	50	ug/L	15
p-Isopropyltoluene	ND	50	ug/L	15
Methylene chloride	ND	50	ug/L	15
4-Methyl-2-pentanone	ND	250	ug/L	150
Methyl tert-butyl ether	ND	50	ug/L	25
Naphthalene	ND	50	ug/L	25
n-Propylbenzene	ND	50	ug/L	20
Styrene	ND	50	ug/L	15
1,1,1,2-Tetrachloroethane	ND	50	ug/L	15
1,1,2,2-Tetrachloroethane	ND	50	ug/L	20
Tetrachloroethene	ND	50	ug/L	15
Toluene	ND	50	ug/L	15
1,2,3-Trichlorobenzene	ND	50	ug/L	20
1,2,4-Trichloro- benzene	ND	50	ug/L	15
1,1,1-Trichloroethane	ND	50	ug/L	10
1,1,2-Trichloroethane	ND	50	ug/L	15
Trichloroethene	87	50	ug/L	15
Trichlorofluoromethane	ND	100	ug/L	15
1,2,3-Trichloropropane	ND	50	ug/L	20
1,1,2-Trichlorotrifluoro- ethane	ND	50	ug/L	20
1,2,4-Trimethylbenzene	ND	50	ug/L	15
1,3,5-Trimethylbenzene	ND	50	ug/L	10
Vinyl chloride	ND	50	ug/L	15
m-Xylene & p-Xylene	ND	50	ug/L	25
o-Xylene	ND	50	ug/L	10
Xylenes (total)	ND	50	ug/L	40

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	92	(75 - 130)
1,2-Dichloroethane-d4	120	(65 - 135)
Toluene-d8	98	(80 - 130)

NOTE(S) :

J Estimated result. Result is less than RL.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZCMW002_WG061505_01

TOTAL Metals

Lot-Sample #....: E5F170101-003 **Matrix.....: WG**
Date Sampled....: 06/15/05 17:59 **Date Received...: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Prep Batch #....: 5172210							
Manganese	2.8	0.015	mg/L	SW846 6010B	06/21-06/22/05	HDR071AJ	
		Dilution Factor: 1		Analysis Time...: 13:13	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....		: 0.0010
Iron	1.2	0.10	mg/L	SW846 6010B	06/21-06/22/05	HDR071AM	
		Dilution Factor: 1		Analysis Time...: 13:13	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....		: 0.030

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZCMW002_WG061505_01

DISSOLVED Metals

Lot-Sample #....: E5F170101-003 **Matrix.....: WG**
Date Sampled...: 06/15/05 17:59 **Date Received..: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #....:	5168217						
Manganese	2.4 J	0.015	mg/L		SW846 6010B	06/20-06/21/05 HDR071AH	
		Dilution Factor: 1			Analysis Time...: 12:59	Analyst ID.....: 021088	
		Instrument ID...: M01			MS Run #.....: 5168147	MDL.....: 0.0010	

NOTE(S) :

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: IRZCMN002_WG061505_01

General Chemistry

Lot-Sample #....: E5F170101-003 Work Order #....: HDR07 Matrix.....: WG
 Date Sampled....: 06/15/05 17:59 Date Received...: 06/16/05 14:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bromide	0.19 B	0.50	mg/L	MCAWW 300.0A	06/17/05	5168091
		Dilution Factor: 1		Analysis Time...: 07:16	Analyst ID.....: 0000221	
		Instrument ID...: W01		MS Run #.....: 5168054	MDL.....: 0.10	
Chloride	152	10.0	mg/L	MCAWW 300.0A	06/17/05	5168088
		Dilution Factor: 10		Analysis Time...: 10:13	Analyst ID.....: 0000224	
		Instrument ID...: W01		MS Run #.....: 5168052	MDL.....: 3.0	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168093
		Dilution Factor: 1		Analysis Time...: 07:16	Analyst ID.....: 0000222	
		Instrument ID...: W01		MS Run #.....: 5168055	MDL.....: 0.030	
Nitrite as N	ND G	1.0	mg/L	MCAWW 300.0A	06/17/05	5168090
		Dilution Factor: 10		Analysis Time...: 10:13	Analyst ID.....: 0000225	
		Instrument ID...: W01		MS Run #.....: 5168053	MDL.....: 0.30	
Sulfate	3.6	1.0	mg/L	MCAWW 300.0A	06/17/05	5168094
		Dilution Factor: 1		Analysis Time...: 07:16	Analyst ID.....: 0000223	
		Instrument ID...: W01		MS Run #.....: 5168056	MDL.....: 0.20	
Total Organic Carbon 157 (TOC)	10.0	mg/L		SW846 9060	06/20/05	5171639
		Dilution Factor: 10		Analysis Time...: 17:55	Analyst ID.....: 9999956	
		Instrument ID...: W08		MS Run #.....: 5172119	MDL.....: 4.0	

NOTE(S) :

RL Reporting Limit

B Estimated result. Result is less than RL.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW001_WG061505_01

GC/MS Volatiles

Lot-Sample #....: E5F170101-004 Work Order #....: HDR081AL Matrix.....: WG
 Date Sampled....: 06/15/05 19:08 Date Received...: 06/16/05 14:30 MS Run #.....: 5172359
 Prep Date.....: 06/20/05 Analysis Date...: 06/21/05
 Prep Batch #....: 5172578 Analysis Time...: 01:34
 Dilution Factor: 125
 Analyst ID.....: 015590 Instrument ID...: MSR
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	1200	ug/L	380
Benzene	ND	120	ug/L	38
Bromobenzene	ND	120	ug/L	38
Bromochloromethane	ND	120	ug/L	38
Bromoform	ND	120	ug/L	38
Bromomethane	ND	250	ug/L	120
2-Butanone	ND	620	ug/L	380
n-Butylbenzene	ND	120	ug/L	38
sec-Butylbenzene	ND	120	ug/L	38
tert-Butylbenzene	ND	120	ug/L	25
Carbon disulfide	ND	120	ug/L	38
Carbon tetrachloride	ND	120	ug/L	38
Chlorobenzene	9000	120	ug/L	38
Dibromochloromethane	ND	120	ug/L	50
Bromodichloromethane	ND	120	ug/L	38
Chloroethane	ND	250	ug/L	38
Chloroform	ND	120	ug/L	38
Chloromethane	ND	250	ug/L	38
2-Chlorotoluene	ND	120	ug/L	38
4-Chlorotoluene	ND	120	ug/L	38
1,2-Dibromo-3-chloro-propane	ND	250	ug/L	88
1,2-Dibromoethane (EDB)	ND	120	ug/L	38
Dibromomethane	ND	120	ug/L	50
1,2-Dichlorobenzene	ND	120	ug/L	38
1,3-Dichlorobenzene	ND	120	ug/L	38
1,4-Dichlorobenzene	ND	120	ug/L	38
Dichlorodifluoromethane	ND	250	ug/L	50
1,1-Dichloroethane	ND	120	ug/L	25
1,2-Dichloroethane	ND	120	ug/L	50
1,1-Dichloroethene	ND	120	ug/L	38
cis-1,2-Dichloroethene	ND	120	ug/L	38
trans-1,2-Dichloroethene	ND	120	ug/L	38
1,2-Dichloropropane	ND	120	ug/L	38
1,3-Dichloropropane	ND	120	ug/L	50
2,2-Dichloropropane	ND	120	ug/L	38
1,1-Dichloropropene	ND	120	ug/L	38

(Continued on next page)

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW001_WG061505_01

GC/MS Volatiles

Lot-Sample #...: E5F170101-004 Work Order #...: HDR081AL Matrix.....: WG

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
cis-1,3-Dichloropropene	ND	120	ug/L	38
trans-1,3-Dichloropropene	ND	120	ug/L	62
Ethylbenzene	ND	120	ug/L	25
Hexachlorobutadiene	ND	120	ug/L	38
2-Hexanone	ND	620	ug/L	380
Isopropylbenzene	ND	120	ug/L	38
p-Isopropyltoluene	ND	120	ug/L	38
Methylene chloride	ND	120	ug/L	38
4-Methyl-2-pentanone	ND	620	ug/L	380
Methyl tert-butyl ether	ND	120	ug/L	62
Naphthalene	ND	120	ug/L	62
n-Propylbenzene	ND	120	ug/L	50
Styrene	ND	120	ug/L	38
1,1,1,2-Tetrachloroethane	ND	120	ug/L	38
1,1,2,2-Tetrachloroethane	ND	120	ug/L	50
Tetrachloroethene	ND	120	ug/L	38
Toluene	ND	120	ug/L	38
1,2,3-Trichlorobenzene	ND	120	ug/L	50
1,2,4-Trichloro- benzene	ND	120	ug/L	38
1,1,1-Trichloroethane	ND	120	ug/L	25
1,1,2-Trichloroethane	ND	120	ug/L	38
Trichloroethene	ND	120	ug/L	38
Trichlorofluoromethane	ND	250	ug/L	38
1,2,3-Trichloropropane	ND	120	ug/L	50
1,1,2-Trichlorotrifluoro- ethane	ND	120	ug/L	50
1,2,4-Trimethylbenzene	ND	120	ug/L	38
1,3,5-Trimethylbenzene	ND	120	ug/L	25
Vinyl chloride	ND	120	ug/L	38
m-Xylene & p-Xylene	ND	120	ug/L	62
o-Xylene	ND	120	ug/L	25
Xylenes (total)	ND	120	ug/L	100
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
Bromofluorobenzene	98	(75 - 130)		
1,2-Dichloroethane-d4	119	(65 - 135)		
Toluene-d8	107	(80 - 130)		

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW001_WG061505_01

TOTAL Metals

Lot-Sample #...: E5F170101-004 Matrix.....: WG
 Date Sampled...: 06/15/05 19:08 Date Received..: 06/16/05 14:30

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Prep Batch #...: 5172210							
Manganese	0.23	0.015	mg/L	SW846 6010B	06/21-06/22/05	HDR081AJ	
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....:	021088	
		Instrument ID..: M01		MS Run #.....: 5173249	MDL.....:	0.0010	
Iron	0.16	0.10	mg/L	SW846 6010B	06/21-06/22/05	HDR081AM	
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....:	021088	
		Instrument ID..: M01		MS Run #.....: 5173249	MDL.....:	0.030	

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW001_WG061505_01

DISSOLVED Metals

Lot-Sample #....: E5F170101-004

Matrix.....: WG

Date Sampled....: 06/15/05 19:08 Date Received..: 06/16/05 14:30

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #....:	5168217						
Manganese	0.21 J	0.015	mg/L		SW846 6010B	06/20-06/21/05	HDR081AH
		Dilution Factor:	1		Analysis Time...: 13:07	Analyst ID.....:	021088
		Instrument ID..:	M01		MS Run #.....: 5168147	MDL.....:	0.0010

NOTE(S) :

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW001_WG061505_01

General Chemistry

Lot-Sample #....: E5F170101-004 Work Order #....: HDR08 Matrix.....: WG
 Date Sampled...: 06/15/05 19:08 Date Received...: 06/16/05 14:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Bromide	0.22 B	0.50	mg/L	MCAWW 300.0A	06/17/05	5168091
		Dilution Factor: 1		Analysis Time...: 07:32	Analyst ID.....: 0000229	
		Instrument ID...: W01		MS Run #.....: 5168054	MDL.....: 0.10	
Chloride	87.8	5.0	mg/L	MCAWW 300.0A	06/17/05	5168088
		Dilution Factor: 5		Analysis Time...: 10:29	Analyst ID.....: 0000224	
		Instrument ID...: W01		MS Run #.....: 5168052	MDL.....: 1.5	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168093
		Dilution Factor: 1		Analysis Time...: 07:32	Analyst ID.....: 0000222	
		Instrument ID...: W01		MS Run #.....: 5168055	MDL.....: 0.030	
Nitrite as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168090
		Dilution Factor: 1		Analysis Time...: 07:32	Analyst ID.....: 0000225	
		Instrument ID...: W01		MS Run #.....: 5168053	MDL.....: 0.030	
Sulfate	99.0	5.0	mg/L	MCAWW 300.0A	06/17/05	5168094
		Dilution Factor: 5		Analysis Time...: 10:29	Analyst ID.....: 0000223	
		Instrument ID...: W01		MS Run #.....: 5168056	MDL.....: 1.0	
Total Organic Carbon (TOC)	15.8	1.0	mg/L	SW846 9060	06/20/05	5171639
		Dilution Factor: 1		Analysis Time...: 17:55	Analyst ID.....: 9999956	
		Instrument ID...: W08		MS Run #.....: 5172119	MDL.....: 0.40	

NOTE(S) :

RL Reporting Limit

B Estimated result. Result is less than RL.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW002_WG061505_01

GC/MS Volatiles

Lot-Sample #....: E5F170101-005 Work Order #....: HDR091AL Matrix.....: WG
 Date Sampled...: 06/15/05 20:08 Date Received..: 06/16/05 14:30 MS Run #.....: 5172359
 Prep Date.....: 06/20/05 Analysis Date...: 06/21/05
 Prep Batch #....: 5172578 Analysis Time...: 01:58
 Dilution Factor: 100
 Analyst ID.....: 015590 Instrument ID...: MSR
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	1000	ug/L	300
Benzene	50 J	100	ug/L	30
Bromobenzene	ND	100	ug/L	30
Bromochloromethane	ND	100	ug/L	30
Bromoform	ND	100	ug/L	30
Bromomethane	ND	200	ug/L	100
2-Butanone	ND	500	ug/L	300
n-Butylbenzene	ND	100	ug/L	30
sec-Butylbenzene	ND	100	ug/L	30
tert-Butylbenzene	ND	100	ug/L	20
Carbon disulfide	ND	100	ug/L	30
Carbon tetrachloride	ND	100	ug/L	30
Chlorobenzene	7400	100	ug/L	30
Dibromochloromethane	ND	100	ug/L	40
Bromodichloromethane	ND	100	ug/L	30
Chloroethane	ND	200	ug/L	30
Chloroform	ND	100	ug/L	30
Chloromethane	ND	200	ug/L	30
2-Chlorotoluene	ND	100	ug/L	30
4-Chlorotoluene	ND	100	ug/L	30
1,2-Dibromo-3-chloro-propane	ND	200	ug/L	70
1,2-Dibromoethane (EDB)	ND	100	ug/L	30
Dibromomethane	ND	100	ug/L	40
1,2-Dichlorobenzene	ND	100	ug/L	30
1,3-Dichlorobenzene	ND	100	ug/L	30
1,4-Dichlorobenzene	ND	100	ug/L	30
Dichlorodifluoromethane	ND	200	ug/L	40
1,1-Dichloroethane	ND	100	ug/L	20
1,2-Dichloroethane	ND	100	ug/L	40
1,1-Dichloroethene	ND	100	ug/L	30
cis-1,2-Dichloroethene	ND	100	ug/L	30
trans-1,2-Dichloroethene	ND	100	ug/L	30
1,2-Dichloropropane	ND	100	ug/L	30
1,3-Dichloropropane	ND	100	ug/L	40
2,2-Dichloropropane	ND	100	ug/L	30
1,1-Dichloropropene	ND	100	ug/L	30

(Continued on next page)

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW002_WG061505_01

GC/MS Volatiles

Lot-Sample #....: E5F170101-005 Work Order #....: HDR091AL Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
cis-1,3-Dichloropropene	ND	100	ug/L	30
trans-1,3-Dichloropropene	ND	100	ug/L	50
Ethylbenzene	ND	100	ug/L	20
Hexachlorobutadiene	ND	100	ug/L	30
2-Hexanone	ND	500	ug/L	300
Isopropylbenzene	ND	100	ug/L	30
p-Isopropyltoluene	ND	100	ug/L	30
Methylene chloride	ND	100	ug/L	30
4-Methyl-2-pentanone	ND	500	ug/L	300
Methyl tert-butyl ether	ND	100	ug/L	50
Naphthalene	ND	100	ug/L	50
n-Propylbenzene	ND	100	ug/L	40
Styrene	ND	100	ug/L	30
1,1,1,2-Tetrachloroethane	ND	100	ug/L	30
1,1,2,2-Tetrachloroethane	ND	100	ug/L	40
Tetrachloroethene	ND	100	ug/L	30
Toluene	ND	100	ug/L	30
1,2,3-Trichlorobenzene	ND	100	ug/L	40
1,2,4-Trichloro- benzene	ND	100	ug/L	30
1,1,1-Trichloroethane	ND	100	ug/L	20
1,1,2-Trichloroethane	ND	100	ug/L	30
Trichloroethene	430	100	ug/L	30
Trichlorofluoromethane	ND	200	ug/L	30
1,2,3-Trichloropropane	ND	100	ug/L	40
1,1,2-Trichlorotrifluoro- ethane	ND	100	ug/L	40
1,2,4-Trimethylbenzene	ND	100	ug/L	30
1,3,5-Trimethylbenzene	ND	100	ug/L	20
Vinyl chloride	ND	100	ug/L	30
m-Xylene & p-Xylene	ND	100	ug/L	50
<i>o</i> -Xylene	ND	100	ug/L	20
Xylenes (total)	ND	100	ug/L	80

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(75 - 130)
1,2-Dichloroethane-d4	117	(65 - 135)
Toluene-d8	112	(80 - 130)

NOTE(S) :

J Estimated result. Result is less than RL.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW002_WG061505_01

TOTAL Metals

Lot-Sample #...: E5F170101-005 **Matrix.....: WG**
Date Sampled...: 06/15/05 20:08 **Date Received..: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Prep Batch #...: 5172210							
Manganese	0.15	0.015	mg/L	SW846 6010B	06/21-06/22/05	HDR091AJ	
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.0010	
Iron	0.18	0.10	mg/L	SW846 6010B	06/21-06/22/05	HDR091AM	
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.030	

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW002_WG061505_01

DISSOLVED Metals

Lot-Sample #....: E5F170101-005

Date Sampled...: 06/15/05 20:08 Date Received...: 06/16/05 14:30

Matrix.....: WG

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ANALYSIS DATE	ORDER #
		LIMIT	UNITS						
Prep Batch #....: 5168217									
Manganese	0.13 J	0.015	mg/L		SW846 6010B	06/20-06/21/05	HDR091AH		
		Dilution Factor: 1			Analysis Time...: 13:15		Analyst ID.....: 021088		
		Instrument ID..: M01			MS Run #.....: 5168147		MDL.....: 0.0010		

NOTE(S) :

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

ARCADIS Geraghty & Miller, Inc.

Client Sample ID: CMW002_WG061505_01

General Chemistry

Lot-Sample #....: E5F170101-005 Work Order #....: HDR09 Matrix.....: WG
 Date Sampled...: 06/15/05 20:08 Date Received..: 06/16/05 14:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Bromide	0.24 B	0.50	mg/L	MCAWW 300.0A	06/17/05	5168091
		Dilution Factor: 1		Analysis Time...: 07:48	Analyst ID.....: 0000229	
		Instrument ID...: W01		MS Run #.....: 5168054	MDL.....: 0.10	
Chloride	110	5.0	mg/L	MCAWW 300.0A	06/17/05	5168088
		Dilution Factor: 5		Analysis Time...: 10:45	Analyst ID.....: 0000224	
		Instrument ID...: W01		MS Run #.....: 5168052	MDL.....: 1.5	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168093
		Dilution Factor: 1		Analysis Time...: 07:48	Analyst ID.....: 0000222	
		Instrument ID...: W01		MS Run #.....: 5168055	MDL.....: 0.030	
Nitrite as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168090
		Dilution Factor: 1		Analysis Time...: 07:48	Analyst ID.....: 0000225	
		Instrument ID...: W01		MS Run #.....: 5168053	MDL.....: 0.030	
Sulfate	89.1	5.0	mg/L	MCAWW 300.0A	06/17/05	5168094
		Dilution Factor: 5		Analysis Time...: 10:45	Analyst ID.....: 0000223	
		Instrument ID...: W01		MS Run #.....: 5168056	MDL.....: 1.0	
Total Organic Carbon (TOC)	13.3	1.0	mg/L	SW846 9060	06/20/05	5171639
		Dilution Factor: 1		Analysis Time...: 17:55	Analyst ID.....: 9999956	
		Instrument ID...: W08		MS Run #.....: 5172119	MDL.....: 0.40	

NOTE(S) :

RL Reporting Limit

B Estimated result. Result is less than RL.

SEVERN
TRENT

STL

STL Los Angeles
Raw Data

QC DATA ASSOCIATION SUMMARY

E5F170101

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WG	SW846 8260B		5171669	5171380
002	WG	MCAWW 300.0A		5168088	5168052
	WG	MCAWW 300.0A		5168094	5168056
	WG	MCAWW 300.0A		5168093	5168055
	WG	SW846 9060		5171406	5171311
	WG	MCAWW 300.0A		5168091	5168054
	WG	MCAWW 300.0A		5168090	5168053
	WG	SW846 8260B		5172578	5172359
	WG	SW846 6010B		5168217	5168147
	WG	SW846 6010B		5172210	5173249
003	WG	MCAWW 300.0A		5168088	5168052
	WG	MCAWW 300.0A		5168094	5168056
	WG	MCAWW 300.0A		5168093	5168055
	WG	SW846 9060		5171639	5172119
	WG	MCAWW 300.0A		5168091	5168054
	WG	MCAWW 300.0A		5168090	5168053
	WG	SW846 8260B		5171669	5171380
	WG	SW846 6010B		5168217	5168147
	WG	SW846 6010B		5172210	5173249
004	WG	MCAWW 300.0A		5168088	5168052
	WG	MCAWW 300.0A		5168094	5168056
	WG	MCAWW 300.0A		5168093	5168055
	WG	SW846 9060		5171639	5172119
	WG	MCAWW 300.0A		5168091	5168054
	WG	MCAWW 300.0A		5168090	5168053
	WG	SW846 8260B		5172578	5172359
	WG	SW846 6010B		5168217	5168147
	WG	SW846 6010B		5172210	5173249
005	WG	MCAWW 300.0A		5168088	5168052
	WG	MCAWW 300.0A		5168094	5168056
	WG	MCAWW 300.0A		5168093	5168055
	WG	SW846 9060		5171639	5172119
	WG	MCAWW 300.0A		5168091	5168054
	WG	MCAWW 300.0A		5168090	5168053
	WG	SW846 8260B		5172578	5172359
	WG	SW846 6010B		5168217	5168147
	WG	SW846 6010B		5172210	5173249

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E5F170101
MB Lot-Sample #: E5F200000-669
Analysis Date..: 06/17/05
Dilution Factor: 1

Work Order #...: HD1W61AA
Prep Date.....: 06/17/05
Prep Batch #...: 5171669
Analyst ID.....: 015590

Matrix.....: WATER
Analysis Time..: 18:55
Instrument ID..: MSQ

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT**GC/MS Volatiles**

Client Lot #....: E5F170101

Work Order #....: HD1W61AA

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	96	(75 - 130)		
1,2-Dichloroethane-d4	126	(65 - 135)		
Toluene-d8	99	(80 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E5F170101	Work Order #....: HD4GQ1AA	Matrix.....: WATER
MB Lot-Sample #: E5F210000-578		
Analysis Date..: 06/20/05	Prep Date.....: 06/20/05	Analysis Time..: 18:45
Dilution Factor: 1	Prep Batch #....: 5172578	Instrument ID..: MSR
		Analyst ID.....: 015590

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acetone	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E5F170101

Work Order #....: HD4GQ1AA

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS	
Bromofluorobenzene	97	(75 - 130)		
1,2-Dichloroethane-d4	118	(65 - 135)		
Toluene-d8	106	(80 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E5F210000-210 Prep Batch #...: 5172210						
Manganese	ND	0.015	mg/L	SW846 6010B	06/21-06/22/05	HD2E21CK
		Dilution Factor: 1				
		Analysis Time...: 11:16		Analyst ID.....: 021088	Instrument ID...: M01	
Iron	ND	0.10	mg/L	SW846 6010B	06/21-06/22/05	HD2E21CL
		Dilution Factor: 1				
		Analysis Time...: 11:16		Analyst ID.....: 021088	Instrument ID...: M01	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: ESF170000-217 Prep Batch #....: 5168217						
Manganese	0.0026 B	0.015	mg/L	SW846 6010B	06/20-06/21/05	HDTMN1AA
Dilution Factor: 1						
Analysis Time..: 11:30 Analyst ID....: 021088 Instrument ID...: M01						

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	PREP
		LIMIT	UNITS			ANALYSIS DATE	BATCH #
Bromide	ND	Work Order #: HDR4T1AA 0.50	mg/L	MB Lot-Sample #: MCAWW 300.0A	Dilution Factor: 1 Analysis Time...: 06:11	06/17/05	E5F170000-091 5168091 Instrument ID..: W01
Chloride	ND	Work Order #: HDR4N1AA 1.0	mg/L	MB Lot-Sample #: MCAWW 300.0A	Dilution Factor: 1 Analysis Time...: 06:11	06/17/05	E5F170000-088 5168088 Instrument ID..: W01
Nitrate as N	ND	Work Order #: HDR4W1AA 0.10	mg/L	MB Lot-Sample #: MCAWW 300.0A	Dilution Factor: 1 Analysis Time...: 06:11	06/17/05	E5F170000-093 5168093 Instrument ID..: W01
Nitrite as N	ND	Work Order #: HDR4Q1AA 0.10	mg/L	MB Lot-Sample #: MCAWW 300.0A	Dilution Factor: 1 Analysis Time...: 06:11	06/17/05	E5F170000-090 5168090 Instrument ID..: W01
Sulfate	ND	Work Order #: HDR4X1AA 1.0	mg/L	MB Lot-Sample #: MCAWW 300.0A	Dilution Factor: 1 Analysis Time...: 06:11	06/17/05	E5F170000-094 5168094 Instrument ID..: W01
Total Organic Carbon (TOC)	ND	Work Order #: HD1LP1AA 1.0	mg/L	MB Lot-Sample #: SW846 9060	Dilution Factor: 1 Analysis Time...: 19:30	06/17/05	E5F200000-406 5171406 Instrument ID..: W08
Total Organic Carbon (TOC)	ND	Work Order #: HD2D41AA 1.0	mg/L	MB Lot-Sample #: SW846 9060	Dilution Factor: 1 Analysis Time...: 17:55	06/20/05	E5F200000-639 5171639 Instrument ID..: W08

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E5F170101 Work Order #....: HD1W61AC Matrix.....: WATER
LCS Lot-Sample#: E5F200000-669
Prep Date.....: 06/17/05 Analysis Date...: 06/17/05
Prep Batch #....: 5171669 Analysis Time...: 18:02
Dilution Factor: 1 Instrument ID...: MSQ
Analyst ID.....: 015590

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	86	(75 - 125)	SW846 8260B
Chlorobenzene	84	(75 - 125)	SW846 8260B
1,1-Dichloroethene	81	(65 - 135)	SW846 8260B
Toluene	80	(75 - 125)	SW846 8260B
Trichloroethene	90	(75 - 135)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	105	(75 - 130)
1,2-Dichloroethane-d4	121	(65 - 135)
Toluene-d8	102	(80 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E5F170101	Work Order #....: HD1W61AC	Matrix.....: WATER
LCS Lot-Sample#: E5F200000-669		
Prep Date.....: 06/17/05	Analysis Date...: 06/17/05	
Prep Batch #....: 5171669	Analysis Time...: 18:02	
Dilution Factor: 1	Instrument ID...: MSQ	
Analyst ID.....: 015590		

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>METHOD</u>
Benzene	10.0	8.55	ug/L	86	SW846 8260B
Chlorobenzene	10.0	8.43	ug/L	84	SW846 8260B
1,1-Dichloroethene	10.0	8.06	ug/L	81	SW846 8260B
Toluene	10.0	7.99	ug/L	80	SW846 8260B
Trichloroethene	10.0	9.03	ug/L	90	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	105	(75 - 130)
1,2-Dichloroethane-d4	121	(65 - 135)
Toluene-d8	102	(80 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E5F170101 Work Order #....: HD4GQ1AC Matrix.....: WATER
LCS Lot-Sample#: E5F210000-578
Prep Date.....: 06/20/05 Analysis Date...: 06/20/05
Prep Batch #....: 5172578 Analysis Time...: 17:58
Dilution Factor: 1 Instrument ID...: MSR
Analyst ID.....: 015590

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	107	(75 - 125)	SW846 8260B
Chlorobenzene	104	(75 - 125)	SW846 8260B
1,1-Dichloroethene	115	(65 - 135)	SW846 8260B
Toluene	105	(75 - 125)	SW846 8260B
Trichloroethene	105	(75 - 135)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	102	(75 - 130)
1,2-Dichloroethane-d4	124	(65 - 135)
Toluene-d8	108	(80 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E5F170101 Work Order #....: HD4GQ1AC Matrix.....: WATER
 LCS Lot-Sample#: E5F210000-578
 Prep Date.....: 06/20/05 Analysis Date...: 06/20/05
 Prep Batch #:....: 5172578 Analysis Time...: 17:58
 Dilution Factor: 1 Instrument ID...: MSR
 Analyst ID.....: 015590

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	10.0	10.7	ug/L	107	SW846 8260B
Chlorobenzene	10.0	10.4	ug/L	104	SW846 8260B
1,1-Dichloroethene	10.0	11.5	ug/L	115	SW846 8260B
Toluene	10.0	10.5	ug/L	105	SW846 8260B
Trichloroethene	10.0	10.5	ug/L	105	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(75 - 130)
1,2-Dichloroethane-d4	124	(65 - 135)
Toluene-d8	108	(80 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E5F210000-210 Prep Batch #....: 5172210					
Manganese	99	(85 - 120)	SW846 6010B	06/21-06/22/05	HD2E21CM
		Dilution Factor: 1		Analysis Time...: 11:22	Analyst ID.....: 021088
		Instrument ID...: M01			
Iron	105	(85 - 120)	SW846 6010B	06/21-06/22/05	HD2E21CN
		Dilution Factor: 1		Analysis Time...: 11:22	Analyst ID.....: 021088
		Instrument ID...: M01			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- METHOD	WORK ANALYSIS DATE	ORDER #
LCS Lot-Sample#: E5F210000-210 Prep Batch #...: 5172210							
Manganese	0.500	0.497	mg/L	99	SW846 6010B	06/21-06/22/05	HD2E21CM
			Dilution Factor:	1	Analysis Time...: 11:22		Analyst ID.....: 021088
			Instrument ID...:	M01			
Iron	1.00	1.05	mg/L	105	SW846 6010B	06/21-06/22/05	HD2E21CN
			Dilution Factor:	1	Analysis Time...: 11:22		Analyst ID.....: 021088
			Instrument ID...:	M01			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #....: E5F170101

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#:	E5F170000-217	Prep Batch #....: 5168217				
Manganese	94	(85 - 120)	SW846 6010B	06/20-06/21/05	HDTMN1AE	
		Dilution Factor: 1		Analysis Time..: 11:35		Analyst ID.....: 021088
		Instrument ID..: M01				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- METHOD	WORK ORDER #
------------------	-------------------------	----------------------------	--------------	--------------------------	--------------------------------	-------------------------

LCS Lot-Sample#: E5F170000-217 **Prep Batch #....:** 5168217
Manganese 0.500 0.470 mg/L 94 SW846 6010B 06/20-06/21/05 HDTMN1AE
Dilution Factor: 1 Analysis Time...: 11:35 Analyst ID....: 021088
Instrument ID...: M01

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: E5F170101

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Bromide	99	(90 - 110)	Work Order #: HDR4T1AC LCS Lot-Sample#: E5F170000-091 MCAWW 300.0A	06/17/05	5168091
			Dilution Factor: 1 Analysis Time...: 05:55		Analyst ID.....: 000022
			Instrument ID...: W01		
Chloride	101	(90 - 110)	Work Order #: HDR4N1AC LCS Lot-Sample#: E5F170000-088 MCAWW 300.0A	06/17/05	5168088
			Dilution Factor: 1 Analysis Time...: 05:55		Analyst ID.....: 000022
			Instrument ID...: W01		
Nitrate as N	101	(90 - 110)	Work Order #: HDR4W1AC LCS Lot-Sample#: E5F170000-093 MCAWW 300.0A	06/17/05	5168093
			Dilution Factor: 1 Analysis Time...: 05:55		Analyst ID.....: 000022
			Instrument ID...: W01		
Nitrite as N	101	(90 - 110)	Work Order #: HDR4Q1AC LCS Lot-Sample#: E5F170000-090 MCAWW 300.0A	06/17/05	5168090
			Dilution Factor: 1 Analysis Time...: 05:55		Analyst ID.....: 000022
			Instrument ID...: W01		
Sulfate	100	(90 - 110)	Work Order #: HDR4X1AC LCS Lot-Sample#: E5F170000-094 MCAWW 300.0A	06/17/05	5168094
			Dilution Factor: 1 Analysis Time...: 05:55		Analyst ID.....: 000022
			Instrument ID...: W01		
Total Organic Carbon (TOC)	95	(85 - 115)	Work Order #: HD1LP1AC LCS Lot-Sample#: E5F200000-406 SW846 9060	06/17/05	5171406
			Dilution Factor: 1 Analysis Time...: 19:30		Analyst ID.....: 999995
			Instrument ID...: W08		
Total Organic Carbon (TOC)	104	(85 - 115)	Work Order #: HD2D41AC LCS Lot-Sample#: E5F200000-639 SW846 9060	06/20/05	5171639
			Dilution Factor: 1 Analysis Time...: 17:55		Analyst ID.....: 999995
			Instrument ID...: W08		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	SPIKE	MEASURED	PERCNT	PREPARATION-		PREP	
	AMOUNT	AMOUNT	UNITS	RECVRY	METHOD	ANALYSIS DATE	BATCH #
Bromide			Work Order #: HDR4T1AC LCS Lot-Sample#:	99	MCAWW 300.0A	06/17/05	5168091
	5.00	4.97	mg/L	Dilution Factor: 1	Analysis Time...: 05:55	Analyst ID.....: 000022	
				Instrument ID...: W01			
Chloride			Work Order #: HDR4N1AC LCS Lot-Sample#:	101	MCAWW 300.0A	06/17/05	5168088
	25.0	25.2	mg/L	Dilution Factor: 1	Analysis Time...: 05:55	Analyst ID.....: 000022	
				Instrument ID...: W01			
Nitrate as N			Work Order #: HDR4W1AC LCS Lot-Sample#:	101	MCAWW 300.0A	06/17/05	5168093
	5.00	5.03	mg/L	Dilution Factor: 1	Analysis Time...: 05:55	Analyst ID.....: 000022	
				Instrument ID...: W01			
Nitrite as N			Work Order #: HDR4Q1AC LCS Lot-Sample#:	101	MCAWW 300.0A	06/17/05	5168090
	5.00	5.06	mg/L	Dilution Factor: 1	Analysis Time...: 05:55	Analyst ID.....: 000022	
				Instrument ID...: W01			
Sulfate			Work Order #: HDR4X1AC LCS Lot-Sample#:	100	MCAWW 300.0A	06/17/05	5168094
	25.0	25.0	mg/L	Dilution Factor: 1	Analysis Time...: 05:55	Analyst ID.....: 000022	
				Instrument ID...: W01			
Total Organic Carbon (TOC)			Work Order #: HD1LP1AC LCS Lot-Sample#:	95	SW846 9060	06/17/05	5171406
	25.0	23.8	mg/L	Dilution Factor: 1	Analysis Time...: 19:30	Analyst ID.....: 999995	
				Instrument ID...: W08			
Total Organic Carbon (TOC)			Work Order #: HD2D41AC LCS Lot-Sample#:	104	SW846 9060	06/20/05	5171639
	25.0	26.1	mg/L	Dilution Factor: 1	Analysis Time...: 17:55	Analyst ID.....: 999995	
				Instrument ID...: W08			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E5F170101	Work Order #....: HDR071AN-MS	Matrix.....: WG
MS Lot-Sample #: E5F170101-003	HDR071AP-MSD	
Date Sampled....: 06/15/05 17:59	Date Received...: 06/16/05 14:30	MS Run #.....: 5171380
Prep Date.....: 06/17/05	Analysis Date...: 06/18/05	
Prep Batch #....: 5171669	Analysis Time...: 02:29	
Dilution Factor: 50	Analyst ID.....: 015590	Instrument ID...: MSQ

PARAMETER	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	RECOVERY	LIMITS			
Benzene	95	(75 - 125)			SW846 8260B
	78	(75 - 125)	19	(0-25)	SW846 8260B
Chlorobenzene	97	(75 - 125)			SW846 8260B
	88	(75 - 125)	9.8	(0-25)	SW846 8260B
1,1-Dichloroethene	134	(65 - 135)			SW846 8260B
	121	(65 - 135)	9.6	(0-25)	SW846 8260B
Toluene	97	(75 - 125)			SW846 8260B
	89	(75 - 125)	8.9	(0-25)	SW846 8260B
Trichloroethene	98	(75 - 135)			SW846 8260B
	103	(75 - 135)	4.2	(0-25)	SW846 8260B
<hr/>					
SURROGATE	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	RECOVERY	LIMITS			
Bromofluorobenzene	106	(75 - 130)			
	103	(75 - 130)			
1,2-Dichloroethane-d4	99	(65 - 135)			
	97	(65 - 135)			
Toluene-d8	107	(80 - 130)			
	106	(80 - 130)			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	
Benzene	ND	500	473	ug/L	95		SW846 8260B
	ND	500	392	ug/L	78	19	SW846 8260B
Chlorobenzene	ND	500	484	ug/L	97		SW846 8260B
	ND	500	439	ug/L	88	9.8	SW846 8260B
1, 1-Dichloroethene	32	500	701	ug/L	134		SW846 8260B
	32	500	637	ug/L	121	9.6	SW846 8260B
Toluene	ND	500	484	ug/L	97		SW846 8260B
	ND	500	443	ug/L	89	8.9	SW846 8260B
Trichloroethene	87	500	578	ug/L	98		SW846 8260B
	87	500	602	ug/L	103	4.2	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	106	(75 - 130)
	103	(75 - 130)
1,2-Dichloroethane-d4	99	(65 - 135)
	97	(65 - 135)
Toluene-d8	107	(80 - 130)
	106	(80 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

PARAMETER	PERCENT	RECOVERY	RPD	RPD	METHOD
	RECOVERY	LIMITS		LIMITS	
Benzene	105	(75 - 125)	7.4	(0-25)	SW846 8260B
	113	(75 - 125)			SW846 8260B
Chlorobenzene	105	(75 - 125)	7.3	(0-25)	SW846 8260B
	113	(75 - 125)			SW846 8260B
1, 1-Dichloroethene	113	(65 - 135)	10	(0-25)	SW846 8260B
	126	(65 - 135)			SW846 8260B
Toluene	105	(75 - 125)	7.3	(0-25)	SW846 8260B
	113	(75 - 125)			SW846 8260B
Trichloroethene	109	(75 - 135)	0.93	(0-25)	SW846 8260B
	115	(75 - 135)			SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	104	(75 - 130)
	106	(75 - 130)
1,2-Dichloroethane-d4	119	(65 - 135)
	117	(65 - 135)
Toluene-d8	105	(80 - 130)
	109	(80 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E5F170101 **Work Order #....:** HDR061AN-MS **Matrix.....:** WG
MS Lot-Sample #: E5F170101-002 **HDR061AP-MSD**
Date Sampled....: 06/15/05 16:25 **Date Received...:** 06/16/05 14:30 **MS Run #.....:** 5172359
Prep Date.....: 06/20/05 **Analysis Date...:** 06/21/05
Prep Batch #....: 5172578 **Analysis Time...:** 00:24
Dilution Factor: 125 **Analyst ID.....:** 015590 **Instrument ID...:** MSR

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	
Benzene	ND	1250	1320	ug/L	105		SW846 8260B
	ND	1250	1420	ug/L	113	7.4	SW846 8260B
Chlorobenzene	ND	1250	1310	ug/L	105		SW846 8260B
	ND	1250	1410	ug/L	113	7.3	SW846 8260B
1,1-Dichloroethene	110	1250	1530	ug/L	113		SW846 8260B
	110	1250	1690	ug/L	126	10	SW846 8260B
Toluene	ND	1250	1310	ug/L	105		SW846 8260B
	ND	1250	1410	ug/L	113	7.3	SW846 8260B
Trichloroethene	7100	1250	8500	ug/L	109		SW846 8260B
	7100	1250	8580	ug/L	115	0.93	SW846 8260B

SURROGATE	PERCENT	RECOVERY	RECOVERY
	RECOVERY	LIMITS	
Bromofluorobenzene	104	(75 - 130)	
	106	(75 - 130)	
1,2-Dichloroethane-d4	119	(65 - 135)	
	117	(65 - 135)	
Toluene-d8	105	(80 - 130)	
	109	(80 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled....: 06/17/05 14:25 Date Received...: 06/17/05 19:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E5F170423-002 Prep Batch #: 5172210							
Manganese	99	(85 - 120)		SW846 6010B		06/21-06/22/05 HDW3M1C7	
	100	(85 - 120) 0.59 (0-20)		SW846 6010B	Dilution Factor: 1	06/21-06/22/05 HDW3M1C8	
					Analysis Time...: 12:03 Instrument ID...: M01		Analyst ID.....: 021088
					MS Run #.....: 5173249		
Iron	107	(85 - 120)		SW846 6010B		06/21-06/22/05 HDW3M1DA	
	102	(85 - 120) 4.0 (0-20)		SW846 6010B	Dilution Factor: 1	06/21-06/22/05 HDW3M1DC	
					Analysis Time...: 12:03 Instrument ID...: M01		Analyst ID.....: 021088
					MS Run #.....: 5173249		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled....: 06/17/05 14:25 **Date Received..:** 06/17/05 19:00

SAMPLE PARAMETER	SPIKE AMOUNT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
---------------------	-----------------	------------------	-------	------------------	-----	--------	-------------------------------	-----------------

MS Lot-Sample #: E5F170423-002 **Prep Batch #....:** 5172210

Manganese

0.0020	0.500	0.498	mg/L	99	SW846	6010B	06/21-06/22/05	HDW3M1C7
0.0020	0.500	0.501	mg/L	100	0.59	SW846	6010B	06/21-06/22/05 HDW3M1C8
Dilution Factor: 1								
Analysis Time...: 12:03					Instrument ID...: M01		Analyst ID.....: 021088	
MS Run #.....: 5173249								

Iron

0.24	1.00	1.31	mg/L	107	SW846	6010B	06/21-06/22/05	HDW3M1DA
0.24	1.00	1.26	mg/L	102	4.0	SW846	6010B	06/21-06/22/05 HDW3M1DC
Dilution Factor: 1								
Analysis Time...: 12:03					Instrument ID...: M01		Analyst ID.....: 021088	
MS Run #.....: 5173249								

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled....: 06/16/05 11:15 Date Received...: 06/16/05 16:20

PARAMETER	PERCENT RECOVERY	RECOVERY	RPD	RPD	LIMITS	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD	LIMITS			ANALYSIS DATE	ORDER #
MS Lot-Sample #: E5F160396-002 Prep Batch #....: 5168217								
Manganese	95	(85 - 120)			SW846 6010B		06/20-06/21/05 HDR0R1A4	
	99	(85 - 120)	4.1	(0-20)	SW846 6010B	Dilution Factor: 1	06/20-06/21/05 HDR0R1A5	
						Analysis Time...: 11:58	Instrument ID...: M01	Analyst ID.....: 021088
						MS Run #.....: 5168147		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled...: 06/16/05 11:15 Date Received..: 06/16/05 16:20

SAMPLE PARAMETER	SPIKE AMOUNT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #:	E5F160396-002	Prep Batch #....:	5168217					
Manganese								
	0.059	0.500	0.532 mg/L	95		SW846 6010B	06/20-06/21/05	HDR0R1A4
	0.059	0.500	0.554 mg/L	99	4.1	SW846 6010B	06/20-06/21/05	HDR0R1A5
Dilution Factor: 1								
Analysis Time...: 11:58 Instrument ID..: M01 Analyst ID.....: 021088								
MS Run #.....: 5168147								

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled....: 06/14/05 09:36 **Date Received...:** 06/16/05 10:40

PARAMETER	PERCENT	RECOVERY	RPD			METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
	RECOVERY	LIMITS	RPD	LIMITS				
Bromide			WO#:	HDR0R1AW-MS/HDR0R1AX-MSD		MS	Lot-Sample #:	E5F160396-002
	99	(80 - 120)				MCAWW 300.0A	06/17/05	5168091
	95	(80 - 120)	3.6	(0-20)		MCAWW 300.0A	06/17/05	5168091
			Dilution Factor:	5				
			Analysis Time...:	11:17		Instrument ID...: W01		Analyst ID.....: 000022
			MS Run #.....:	5168054				
Chloride			WO#:	HDR0R1AR-MS/HDR0R1AT-MSD		MS	Lot-Sample #:	E5F160396-002
	99	(80 - 120)				MCAWW 300.0A	06/17/05	5168088
	95	(80 - 120)	1.9	(0-20)		MCAWW 300.0A	06/17/05	5168088
			Dilution Factor:	5				
			Analysis Time...:	11:17		Instrument ID...: W01		Analyst ID.....: 000022
			MS Run #.....:	5168052				
Nitrate as N			WO#:	HDR0R1A0-MS/HDR0R1A1-MSD		MS	Lot-Sample #:	E5F160396-002
	97	(80 - 120)				MCAWW 300.0A	06/17/05	5168093
	93	(80 - 120)	2.9	(0-20)		MCAWW 300.0A	06/17/05	5168093
			Dilution Factor:	5				
			Analysis Time...:	11:17		Instrument ID...: W01		Analyst ID.....: 000022
			MS Run #.....:	5168055				
Nitrite as N			WO#:	HDR0R1AU-MS/HDR0R1AV-MSD		MS	Lot-Sample #:	E5F160396-002
	98	(80 - 120)				MCAWW 300.0A	06/17/05	5168090
	93	(80 - 120)	4.4	(0-20)		MCAWW 300.0A	06/17/05	5168090
			Dilution Factor:	5				
			Analysis Time...:	11:17		Instrument ID...: W01		Analyst ID.....: 000022
			MS Run #.....:	5168053				
Sulfate			WO#:	HDR0R1A2-MS/HDR0R1A3-MSD		MS	Lot-Sample #:	E5F160396-002
	100	(80 - 120)				MCAWW 300.0A	06/17/05	5168094
	97	(80 - 120)	2.3	(0-20)		MCAWW 300.0A	06/17/05	5168094
			Dilution Factor:	5				
			Analysis Time...:	11:17		Instrument ID...: W01		Analyst ID.....: 000022
			MS Run #.....:	5168056				
Total Organic Carbon (TOC)			WO#:	HDP931AG-MS/HDP931AH-MSD		MS	Lot-Sample #:	E5F160183-001
	104	(85 - 115)				SW846 9060	06/20/05	5172206
	97	(85 - 115)	5.7	(0-20)		SW846 9060	06/20/05	5172206
			Dilution Factor:	1				
			Analysis Time...:	17:55		Instrument ID...: W08		Analyst ID.....: 999995
			MS Run #.....:	5172119				

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled....: 06/14/05 09:36 Date Received..: 06/16/05 10:40

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	PREP
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	BATCH #
Total Organic Carbon (TOC)		WO#: HDQ0J1AG-MS/HDQ0J1AH-MSD	MS	Lot-Sample #:	E5F160260-005	
104	(85 - 115)		SW846 9060		06/17/05	5171406
103	(85 - 115)	1.2 (0-20)	SW846 9060		06/17/05	5171406
		Dilution Factor: 1				
			Analysis Time...: 19:30	Instrument ID...: W08		Analyst ID.....: 999995
				MS Run #.....: 5171311		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled....: 06/14/05 09:36 **Date Received...:** 06/16/05 10:40

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD	PREPARATION-	PREP
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD			
Bromide									
			WO#:	HDR0R1AW-MS/HDR0R1AX-MSD	MS	Lot-Sample	#:	E5F160396-002	
	0.45	12.5	12.8	mg/L	99		MCAWW	300.0A	06/17/05
	0.45	12.5	12.3	mg/L	95	3.6	MCAWW	300.0A	06/17/05
			Dilution Factor:	5					5168091
			Analysis Time...:	11:17		Instrument ID...:	W01		Analyst ID.....: 000022
			MS Run #.....:	5168054					
Chloride									
			WO#:	HDR0R1AR-MS/HDR0R1AT-MSD	MS	Lot-Sample	#:	E5F160396-002	
	76.1	62.5	138	mg/L	99		MCAWW	300.0A	06/17/05
	76.1	62.5	136	mg/L	95	1.9	MCAWW	300.0A	06/17/05
			Dilution Factor:	5					5168088
			Analysis Time...:	11:17		Instrument ID...:	W01		Analyst ID.....: 000022
			MS Run #.....:	5168052					
Nitrate as N									
			WO#:	HDR0R1A0-MS/HDR0R1A1-MSD	MS	Lot-Sample	#:	E5F160396-002	
	5.5	12.5	17.7	mg/L	97		MCAWW	300.0A	06/17/05
	5.5	12.5	17.2	mg/L	93	2.9	MCAWW	300.0A	06/17/05
			Dilution Factor:	5					5168093
			Analysis Time...:	11:17		Instrument ID...:	W01		Analyst ID.....: 000022
			MS Run #.....:	5168055					
Nitrite as N									
			WO#:	HDR0R1AU-MS/HDR0R1AV-MSD	MS	Lot-Sample	#:	E5F160396-002	
	ND	12.5	12.2	mg/L	98		MCAWW	300.0A	06/17/05
	ND	12.5	11.7	mg/L	93	4.4	MCAWW	300.0A	06/17/05
			Dilution Factor:	5					5168090
			Analysis Time...:	11:17		Instrument ID...:	W01		Analyst ID.....: 000022
			MS Run #.....:	5168053					
Sulfate									
			WO#:	HDR0R1A2-MS/HDR0R1A3-MSD	MS	Lot-Sample	#:	E5F160396-002	
	44.5	62.5	107	mg/L	100		MCAWW	300.0A	06/17/05
	44.5	62.5	105	mg/L	97	2.3	MCAWW	300.0A	06/17/05
			Dilution Factor:	5					5168094
			Analysis Time...:	11:17		Instrument ID...:	W01		Analyst ID.....: 000022
			MS Run #.....:	5168056					
Total Organic Carbon (TOC)									
			WO#:	HDP931AG-MS/HDP931AH-MSD	MS	Lot-Sample	#:	E5F160183-001	
	7.2	25.0	33.3	mg/L	104		SW846	9060	06/20/05
	7.2	25.0	31.4	mg/L	97	5.7	SW846	9060	06/20/05
			Dilution Factor:	1					5172206
			Analysis Time...:	17:55		Instrument ID...:	W08		Analyst ID.....: 999995
			MS Run #.....:	5172119					

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled...: 06/14/05 09:36 Date Received..: 06/16/05 10:40

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			PREPARATION-	PREP
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD		
Total Organic Carbon (TOC)			WO#:	HDQ0J1AG-MS/HDQ0J1AH-MSD	MS	Lot-Sample #:	E5F160260-005	
	2.1	25.0	28.2	mg/L	104	SW846 9060	06/17/05	5171406
	2.1	25.0	27.8	mg/L	103	1.2 SW846 9060	06/17/05	5171406
			Dilution Factor:	1				
			Analysis Time..:	19:30	Instrument ID..:	W08	Analyst ID.....:	999995
			MS Run #.....:	5171311				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.



Client Name: Arcadis
Contact: Eric Lothman
Address: 1400 North Harbor
Bldg # 700
Fullerton, CA 92835

JUL 05 2005

Page: Page 1 of 5
Lab Proj #: P0506319
Report Date: 06/30/05
Client Proj Name: Boeing C-6
Client Proj #: CA000663.0001.00003

Laboratory Results

Total pages in data package: 6

Lab Sample #	Client Sample ID
P0506319-01	IRZMW004-WG061505-01
P0506319-02	IRZMW002-WG061505-01
P0506319-03	CMW001-WG061505-01
P0506319-04	CMW002-WG061505-01

Microseeps test results meet all the requirements of the NELAC standards.

Approved By:

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email bhans@microseeps.com

Case Narrative:

Client Name: Arcadis
Contact: Eric Lothman
Address: 1400 North Harbor
Bldg # 700
Fullerton, CA 92835

Page: Page 2 of 5
Lab Proj #: P0506319
Report Date: 06/30/05
Client Proj Name: Boeing C-6
Client Proj #: CA000663.0001.00003

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received		
IRZMW004-WG061505-01	Water	P0506319-01	15 Jun. 05 16:25	17 Jun. 05 12:54		
RiskAnalysis						
Carbon dioxide	42.000	5.000	mg/L	AM20GAX	6/29/05	mm
Ethane	0.047	0.025	ug/L	AM20GAX	6/29/05	mm
Ethene	0.120	0.025	ug/L	AM20GAX	6/29/05	mm
Methane	67.000	0.100	ug/L	AM20GAX	6/29/05	mm
Nitrogen	20.000	0.400	mg/L	AM20GAX	6/29/05	mm
Oxygen	2.900	0.500	mg/L	AM20GAX	6/29/05	mm



N - NELAC certified analysis

Client Name: Arcadis
Contact: Eric Lothman
Address: 1400 North Harbor
Bldg # 700
Fullerton, CA 92835

Page: Page 3 of 5
Lab Proj #: P0506319
Report Date: 06/30/05
Client Proj Name: Boeing C-6
Client Proj #: CA000663.0001.00003

Sample Description	Matrix	Lab Sample #	Sampled Date/Time		Received	
RZMW002-WG061505-01	Water	P0506319-02	15 Jun. 05	17:59	17 Jun. 05	12:54
Risk Analysis						
Carbon dioxide	30.000	5.000	mg/L	AM20GAX	6/29/05	mm
Ethane	0.086	0.025	ug/L	AM20GAX	6/29/05	mm
Ethene	0.670	0.025	ug/L	AM20GAX	6/29/05	mm
Methane	59.000	0.100	ug/L	AM20GAX	6/29/05	mm
Nitrogen	17.000	0.400	mg/L	AM20GAX	6/29/05	mm
Oxygen	0.750	0.500	mg/L	AM20GAX	6/29/05	mm



N - NELAC certified analysis

Client Name: Arcadis
Contact: Eric Lothman
Address: 1400 North Harbor
Bldg # 700
Fullerton, CA 92835

Page: Page 4 of 5
Lab Proj #: P0506319
Report Date: 06/30/05
Client Proj Name: Boeing C-6
Client Proj #: CA000663.0001.00003

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>	<u>Received</u>	
CMW001-WG061505-01	Water	P0506319-03		15 Jun. 05 19:08	17 Jun. 05	12:54
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
Risk Analysis						
Carbon dioxide	10.000	5.000	mg/L	AM20GAX	6/29/05	mm
Ethane	0.220	0.025	ug/L	AM20GAX	6/29/05	mm
Ethene	0.300	0.025	ug/L	AM20GAX	6/29/05	mm
Methane	6.300	0.100	ug/L	AM20GAX	6/29/05	mm
Nitrogen	19.000	0.400	mg/L	AM20GAX	6/29/05	mm
Oxygen	2.300	0.500	mg/L	AM20GAX	6/29/05	mm



N - NELAC certified analysis

Client Name: Arcadis
Contact: Eric Lothman
Address: 1400 North Harbor
Bldg # 700
Fullerton, CA 92835

Page: Page 5 of 5
Lab Proj #: P0506319
Report Date: 06/30/05
Client Proj Name: Boeing C-6
Client Proj #: CA000663.0001.00003

Sample Description	Matrix	Lab Sample #	Sampled Date/Time		Received	
CMW002-WG061505-01	Water	P0506319-04	15 Jun. 05	20:08	17 Jun. 05	12:54
Risk Analysis						
Carbon dioxide	15.000	5.000	mg/L	AM20GAX	6/29/05	mm
Ethane	0.240	0.025	ug/L	AM20GAX	6/29/05	mm
Ethene	0.071	0.025	ug/L	AM20GAX	6/29/05	mm
Methane	3.300	0.100	ug/L	AM20GAX	6/29/05	mm
Nitrogen	21.000	0.400	mg/L	AM20GAX	6/29/05	mm
Oxygen	4.400	0.500	mg/L	AM20GAX	6/29/05	mm



N - NELAC certified analysis